HENSEL

PASSION FOR POWER.

made in GERMANY since 1931

INTERNATIONAL CATALOGUE No. 17

The Company

Highest quality for the highest requirements

Since 1931 HENSEL has been developing and manufacturing innovative solutions for electrical equipment in buildings. Electrical installation and distribution systems made of high quality thermoplastic are used today because of their special properties in areas where dust and humidity place high demands on the electrical installation.

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Middle East
United Arab Emirates
Bahrain
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Kuwait
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Qatar
Saudi Arabia

Oceania
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New Zealand

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Leading through innovation and quality

The Gustav Hensel GmbH & Co. KG is a leading company specialising in the manufacture of innovative electrical installation and power distribution systems for facility equipment of buildings. Founded in 1931, Hensel today represents a company group which is active worldwide and has about 820 employees, 550 of which are in Germany.

In addition to the parent company in Lennestadt, Germany, subsidiaries and representatives in important foreign markets ensure a continually strong international presence.

Wherever environmental influences, dust and humidity require a particulary sophisticated installation technology, Hensel with its innovative solutions enables the reliable and safe distribution of engergy.
The range of modern electrical installation and power distribution systems for national and international applications has made Hensel into one of the market leaders in the distribution of electrical energy in the low voltage sector.

State of the art technology, clever logistics

- State-of-the-art and automated plastic injection-molding machinery at two sites
- Advanced manufacturing processes used in metal processing and surface coating
- Highly qualified employees and a modern machinery guarantee state-of-the-art injection mould and metal working tools
- Coordination and control of all logistics and storage processes, shipping all over the world

Internationally represented

Subsidiaries abroad:

- Czech Republic, Hungary, Poland, People's Republic of China, India, Turkey, Russia, United Arab Emirates
- Partners in more than 60 countries

Electrotechnical products of highest quality and reliability

Wherever dusty and humid environmental conditions place high demands on the electrical installation, products of highest quality conforming to standards are required for a reliable and safe distribution of electrical energy in the low voltage sector.

VDE Certified Management System 79300/QM/03.95 DIN EN ISO 9001:2008

High quality standards guarantee our customers' competitive advantage in the future.

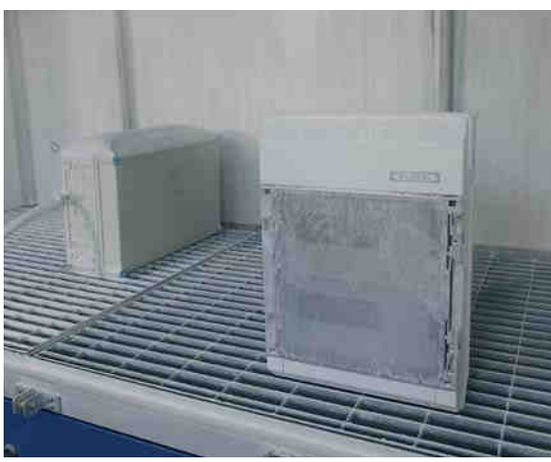
All Hensel production facilities are certified and meet the requirements of **DIN EN ISO 9001:2008**

Internal quality management

- Advanced test methods

Hensel stands for tested quality

- Durability of plastic materials
- Short-circuit withstand capability
- Tests on electromagnetic susceptibility (EMC tests)
- Fire behaviour
- Limits of temperature rise
- Functional tests
- IP degree of protection (dust and water protection)
- Impact resistance
- Temperature resistance
- Corrosion-proof
- Dimensions check via structured light projection

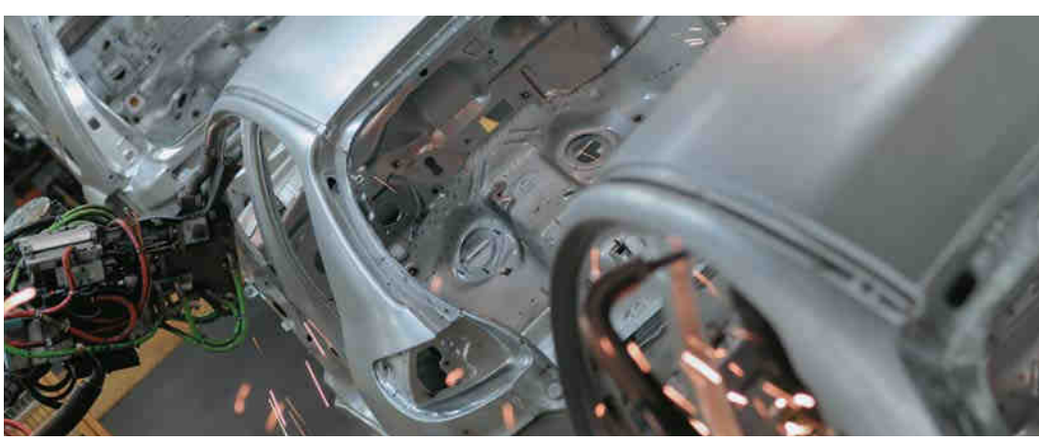


made in GERMANY since 1931

Areas of application

Hensel products guarentee safety in

- Agriculture and farming
- Automotive industries
- Banks and insurance offices
- Cement factories
- Coldstorage facilities
- Gas stations and pipelines
- Hospitals and clinics
- Hotels and cinema complexes
- Industrial, commercial and company buildings
- Leisure and commercial centres (Malls)
- Marine environments
- Metal, wood and paper processors
- Mining
- Photovoltaic plants
- Power stations
- Residential and non-residential buildings
- Schools and universities
- Stadia and sport centres
- Telecommunications
- Traffic infrastructure buildings
- Tunnels and road construction
- Water and waste water treatment plants



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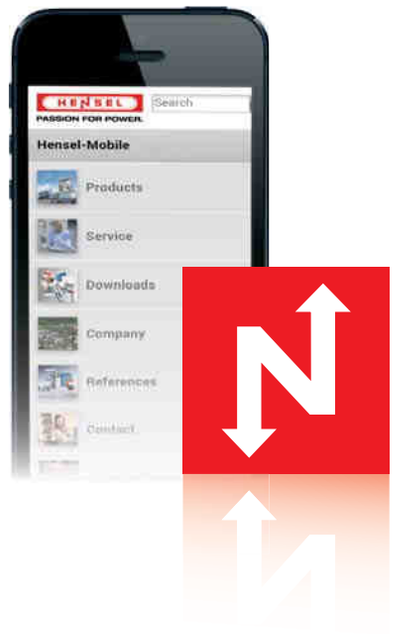

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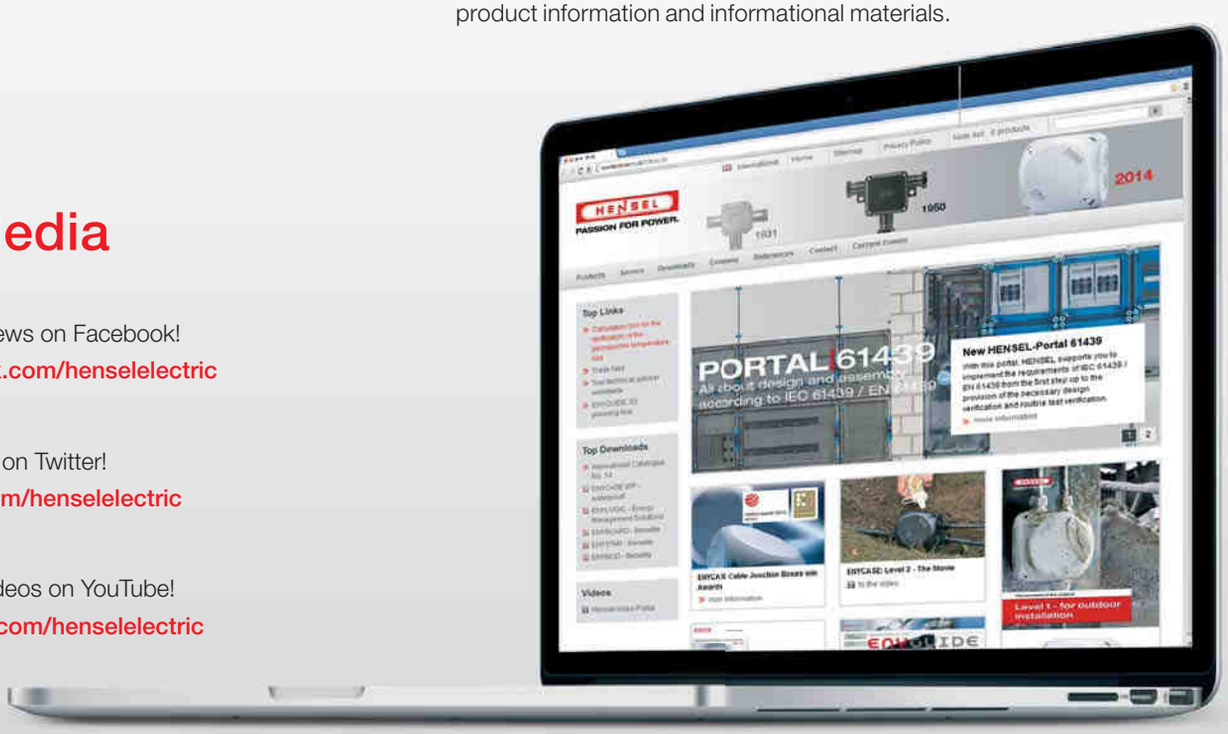

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International and national

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Highly qualified lecturers, modern seminar and training rooms and the latest presentation techniques.

Customized solutions

- Enclosures on customer request for individual applications
- Individual solutions that comply to standards

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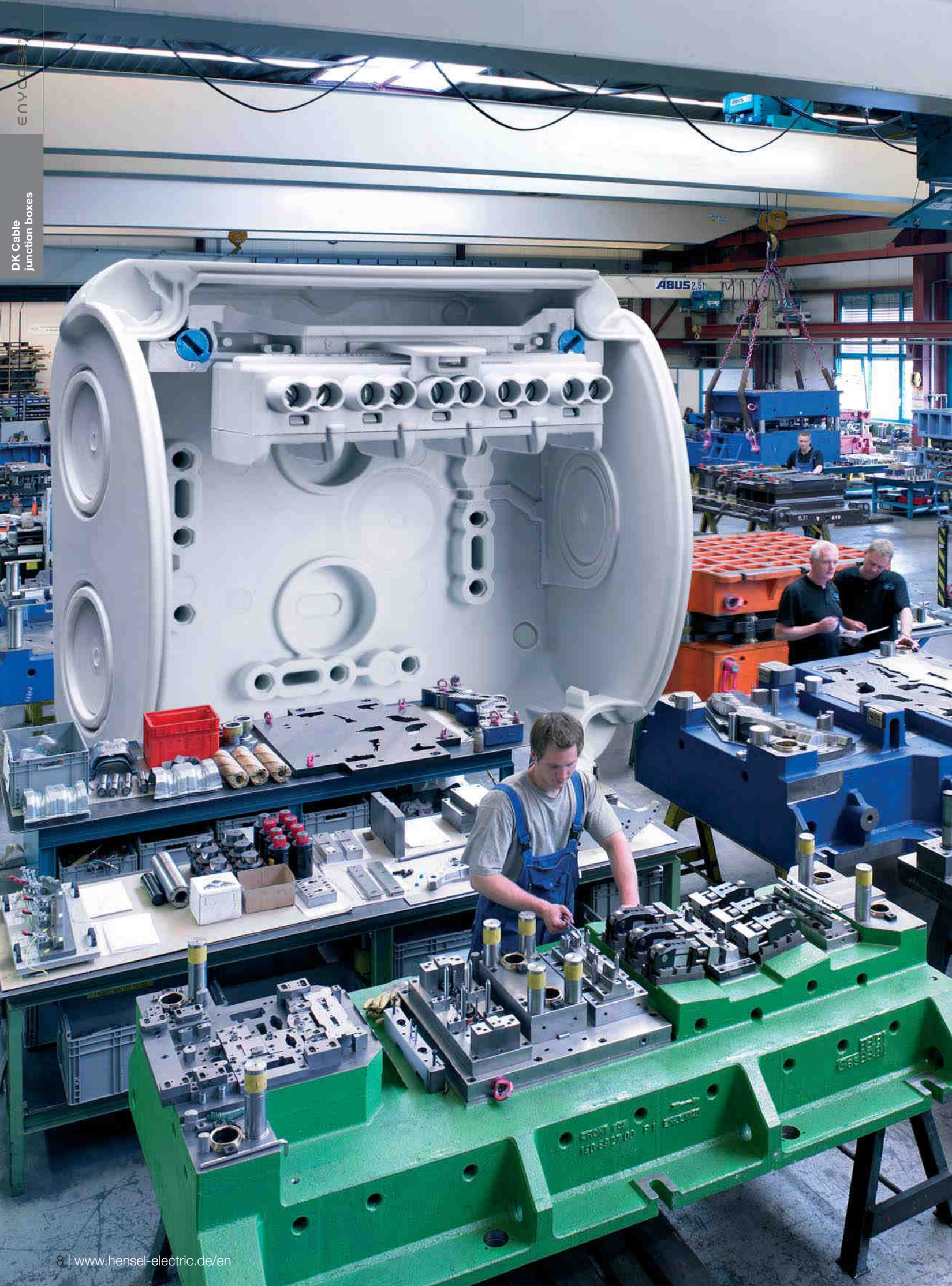
- Planning software
  ENYGUIDE
  www.enyguide.eu
- **Portal | 61439**
  Support platform for distribution technology keeps new IEC 61439 standard under control at www.hensel-electric.de/61439
- Guide for design and assembly of distribution boards up to 630 A according to IEC 61439 / EN 61439

Mobile exhibitions

Mobile exhibitions on system solutions and new developments internationally and nationally

Your specialist partner

Quick support for acute problems on-site


ABUS 2,5t

DK Cable junction boxes

- **1.5 mm² up to 240 mm²**
- **degree of protection IP 54-69**
- **in accordance with IEC 60670-22**

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Further technical information can be found on the Internet
www.hensel-electric.de -> Products

Setting new standards. Every day.

www.enycase.eu

reddot award 2015
winner

GOLD 2015
pro-K award

Various cable entry

push-in and it‘s done

- cable entry via integrated elastic membranes in box walls for fast cable entry up to degree of protection IP 66

- alternatively, a cable gland can be set after removing the elastic membrane and extension ring

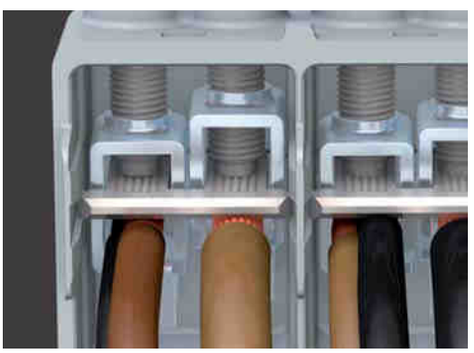
- cable entry through the bottom of the box via integrated elastic membrane

Modern terminal technology

innovative und flexibel

- different terminal positions and mounting options
- up to enclosure size 10 mm² two terminal bars can be mounted in one box, even different terminal sizes are possible

- High-positioned terminals offer more space for wiring - as well when connecting the maximum number of conductors
- protected against accidental loosening



- all terminals with two clamping units per pole
- all terminals with two clamping units per pole
- every pole allows the connection of various conductor cross sections and conductor types

Lots of accessories

perfectly included

- external brackets for fastening are always included

- retaining strap prevents the lid from falling or losing and makes daily installation work easier

- closes quickly by a quarter turn, closed positio nis easily visible
- Easy identification using label as accessories

DK Cable junction boxes
Reference table

Model	Present types	New types
1.5-2.5 mm²	D 9025. D 9125	**DK 0202 G**
		DK 0402 G (larger enclosure)
1.5-4 mm²	D 9045	**DK 0404 G**
		DK 0604 G (larger enclosure)
2.5-6 mm²	K 9065	**DK 0606 G**
		DK 1006 G (larger enclosure)
4-10 mm²	K 9105	**DK 1010 G**
		DK 1610 G (larger enclosure)
10-16 mm²	---	**DK 1616 G**
10-25 mm²	K 9255	**DK 2525 G**
16-35 mm²	K 9355	**DK 3535 G**
	K 9502	**entfällt**
16-50 mm²	K 9504	**DK 5054 G**
	K 9505	**DK 5055 G**

Model	Present types	New types
without terminals	D 9020 D 9120	**DK 0200 G**
	D 9040	**DK 0400 G**
	K 9060	**DK 0600 G**
	K 9100	**DK 1000 G**
	---	**DK 1600 G**
	K 9250	**DK 2500 G**
	K 9350	**DK 3500 G**
	K 9500	**DK 5000 G**

for copper conductors

Model	Present types	New types
without terminals	D 9220	**DK 0200 R**
1.5-2.5 mm²	D 9225	**DK 0202 R**
		DK 0402 R (larger enclosure)
without terminals	D 9240	**DK 0400 R**
1.5-4 mm²	D 9245	**DK 0404 R**
		DK 0604 R (larger enclosure)

for safety lighting circuits

Model	Present types	New types
1.5-2.5 mm²	D 9041	**DK 0402 A**
1.5-4 mm²	K 9061	**DK 0604 A**
6-16 mm²	K 9351	**DK 2516 A**
1.5-50 mm²	KF 9251	**KF 3550 A**
1.5-50 mm²	KF 9501	**KF 5050 A**

for aluminum conductors

Model	Present types	New types
6-25 mm²	K 9259	**DK 2524 S**
6-25 mm²	K 9258	**DK 3525 S**
6-35 mm²	K 9509	**DK 3534 S**
6-35 mm²	K 9507	**DK 5035 S**
6-25 mm²	K 9508	**omitted**
6-25 mm²	K 9503	**omitted**

with main line branch terminals

Model	Present types	New types
1.5-2.5 mm²	RD 9123	**RK 0203 T**
	RD 9125	**RK 0205 T**
	RD 9127	**RK 0207 T**
1.5-4 mm²	RD 9045	**RK 0405 T**
	RD 9041	**RK 0610 T**
	RK 9062	**RK 0612 T**
	RK 9064	**RK 0614 T**
	RK 9109	**RK 1019 T**
	RK 9104	**RK 1024 T**

with terminal locks

Model	Present types	New types
1.5-2.5 mm² 1.5-4 mm²	FK 7045	**FK 0402** **FK 0404**
1.5-6 mm² 1.5-6 mm² 1.5-10 mm²	FK 7105	**FK 0604** **FK 0606** **FK 1610**
1.5-16 mm²	FK 7165	**FK 1616**
1.5-6 mm²	---	**FK 1606**
1.5-2.5 mm²	---	**FK 1608**

tested for insulation integrity and intrinsic fire resistance

DK Cable junction boxes
Reference table

Model	Present types	New types
1.5-2.5 mm²	KF 9025	**KF 0202 G**
		KF 0402 G (larger enclosure)
1.5-4 mm²	KF 9045	**KF 0404 G**
		KF 0604 G (larger enclosure)
2.5-6 mm²	KF 9065	**KF 0606 G**
		KF 1006 G (larger enclosure)
4-10 mm²	KF 9105	**KF 1010 G**
		KF 1610 G (larger enclosure)
6-16 mm²	---	**KF 1616 G**
10-25 mm²	KF 9255	**KF 2525 G**
16-35 mm²	KF 9355	**KF 3535 G**
16-50 mm²	KF 9505	**KF 5050 G**
without terminal	KF 9020	**KF 0200 G**
	KF 9040	**KF 0400 G**
	KF 9060	**KF 0600 G**
	KF 9100	**KF 1000 G**
	---	**KF 1600 G**
	KF 9250	**KF 2500 G**
	KF 9350	**KF 3500 G**
	KF 9500	**KF 5000 G**
1.5-2.5 mm²	KF 5025 KD 5025	**KF 0202 B**
		KF 0402 B (larger enclosure)
1.5-4 mm²	KF 5045 KD 5045	**KF 0404 B**
		KF 0604 B (larger enclosure)
2.5-6 mm²	KF 5065 KD 5065	**KF 0606 B**
		KF 1006 B (larger enclosure)
4-10 mm²	KF 5105 KD 5105	**KF 1010 B**
		KF 1610 B (larger enclosure)
6-16 mm²	---	**KF 1616 B**
10-25 mm²	KF 5255 KD 5255	**KF 2525 B**
16-35 mm²	KF 5355 KD 5355	**KF 3535 B**
16-50 mm²	KF 5505	**KF 5050 B**
without terminal	KF 5020 KD 5020	**KF 0200 B**
	KF 5040 KD 5040	**KF 0400 B**
	KF 5060 KD 5060	**KF 0600 B**
	KF 5100 KD 5100	**KF 1000 B**
	---	**KF 1600 B**
	KF 5250 KD 5250	**KF 2500 B**
	KF 5350 KD 5350	**KF 3500 B**
	KF 5500	**KF 5000 B**

weatherproof, for outdoor installation

DK Cable junction boxes
Reference table

Model	Present types	New types
without knockouts	KF 8020	**KF 0200 H**
	KF 8040	**KF 0400 H**
	KF 8060	**KF 0600 H**
	KF 8100	**KF 1000 H**
	---	**KF 1600 H**
	KF 8250	**KF 2500 H**
	KF 8350	**KF 3500 H**
	KF 8500	**KF 5000 H**
without knockouts	KF 4020 KD 4020	**KF 0200 C**
	KF 4040 KD 4040	**KF 0400 C**
	KF 4060 KD 4060	**KF 0600 C**
	KF 4100 KD 4100	**KF 1000 C**
	---	**KF 1600 C**
	KF 4250 KD 4250	**KF 2500 C**
	KF 4350 KD 4350	**KF 3500 C**
	KF 4500	**KF 5000 C**

weatherproof, for outdoor installation

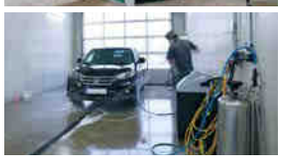
Model	Present types	New types
1.5-2.5 mm²	KF WP 3025	**WP 0202 G**
		WP 0402 G (larger enclosure)
1.5-4 mm²	KF WP 3045	**WP 0404 G**
		WP 0604 G (larger enclosure)
2.5-6 mm²	KF WP 3065	**WP 0606 G**
		WP 1006 G (larger enclosure)
4-10 mm²	KF WP 3105	**WP 1010 G**
1.5-2.5 mm²	KF WP 2025	**WP 0202 B**
		WP 0402 B (larger enclosure)
1.5-4 mm²	KF WP 2045	**WP 0404 B**
		WP 0604 B (larger enclosure)
2.5-6 mm²	KF WP 2065	**WP 0606 B**
		WP 1006 B (larger enclosure)
4-10 mm²	KF WP 2105	**WP 1010 B**

waterproof, for encapsulating

*larger enclosure with more space for wiring

DK Cable junction boxes

Criteria for selection

Applications		Electrical functions		
		Branching and connecting of copper conductors	Branching and connecting of aluminium and copper conductors	
▪ **In rooms with dry climate** ▪ **In damp and wet environments** ▪ **Protected outdoors (refer to technical details)** ▪ **On flameable parts of buildings** ▪ **In buildings with mainly inflammable materials** ▪ **In areas with a high risk of fire**	 	Pages 19-28 Pages 104-115	Pages 30-35	
▪ **Safety lighting circuits** DIN VDE 0100 E DIN VDE 0108-100		Pages 37-39		
▪ **Equipotential bonding**		Page 40		
▪ **Weatherproof, unprotected outdoors** (DIN VDE 0100 Part 737 German Standard) ▪ **Improved behaviour in case of fire** ”flame-resistant” and ”halogenfree”		Pages 50-74		
▪ **Waterproof for encapsulation, unprotected outdoors**		Pages 77-84		
▪ **Intrinsic fire resistance and insulation integrity** **E30 / E60 / E 90** **PH120**		Pages 90-99		
▪ **Cable trunking installation**		Pages 104-105		
▪ **Cable entry via elastic membranes** Three entries in one box wall Cable entry from the rear		Pages 108-111 Pages 114-115		

DK Cable junction boxes

Criteria for selection

	Connecting of solid conductors and stranded conductors	Combining multiple control wires to one control cable	2 circuits in one cable junction box	Main line branch terminals	Without terminals	Box walls without knockouts
	Pages 19-22 Page 30 Page 31 DK 2516 A Pages 37-38 Pages 45-48	Pages 45-48	Pages 104-105	Page 42-43	Pages 27-28 Page 39 Pages 56-58 Pages 65-67 Pages 69-74 Page 105 Page 109 Page 110 DE 9321, DE 9341, Page 111	Pages 69-74
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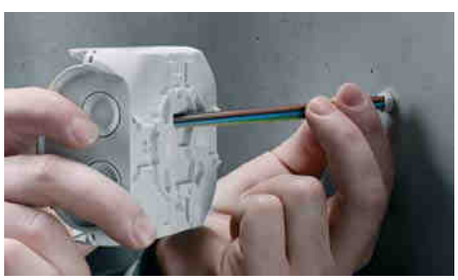
			Pages 103-104 DP 9220, DP 9221, DP 9222		Page 104	

Reference table	
Pressent types	**New types**
D 9025 D 9125	**DK 0202 G** **DK 0402 G**
D 9045	**DK 0404 G** **DK 0604 G**
K 9065	**DK 0606 G** **DK 1006 G**
K 9105	**DK 1010 G** **DK 1610 G**
---	**DK 1616 G**
K 9255	**DK 2525 G**
K 9355	**DK 3535 G**
K 9502	**omiited**
K 9504	**DK 5054 G**
K 9505	**DK 5055 G**
D 9020 D 9120	**DK 0200 G**
D 9040	**DK 0400 G**
K 9060	**DK 0600 G**
K 9100	**DK 1000 G**
---	**DK 1600 G**
K 9250	**DK 2500 G**
K 9350	**DK 3500 G**
K 9500	**DK 5000 G**

DK Cable junction boxes

For normal environment and protected outdoor

Cable entry via integrated elastic membranes or



- With elastic membrane, which can be removed for cable entry via cable glands
- Multi-level knockouts for cable glands in different sizes
- Cable entry through the bottom of the box via integrated elastic membrane
- Closes quickly by a quarter turn - locked position well visible (open - locked)
- Lid fasteners sealable without accessories
- External brackets for wall fixing included
- Retaining strap, details see product description
- Labelling system for circuit description
- High-position terminals with more space for wiring
- All terminals with two clamping units per pole
- Every pole allows the connection of various conductor cross sections and conductor types
- Terminals prevent damage of conductors, also with flexible conductors without ferrule
- Different terminal positions and fastening options
- Material: polypropylene or polycarbonate
- Burning behaviour: glow wire test in accordance with IEC 60695-2-11: 750 °C, flame-retardant, self-extinguishing
- Colour: grey, RAL 7035

DK Cable junction boxes

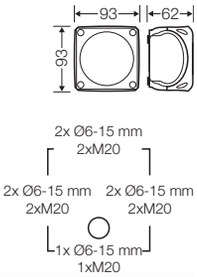
For normal environment and protected outdoor
Cable entry via integrated elastic membrantes or metric knockouts

DK 0202 G NEW

1.5-2.5 mm², Cu 3~

IP 66

- terminal with 2 clamping units per pole
- 5-pole per pole 8 x 0,75 mm² f, 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 2 x 4 mm² sol / f
- with integrated elastic membranes, which can be removed for cable entry via cable glands, sealing range 6.0-15.0 mm
- with one cable entry in the bottom, sealing range Ø 6.0-13.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included



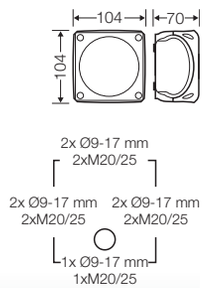
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	20 A
tightening torque for terminal	0.5 Nm
material	PP (polypropylene)

DK 0402 G NEW

1.5-2.5 mm², Cu 3~

IP 66

- terminal with 2 clamping units per pole
- 5-pole per pole 8 x 0,75 mm² f, 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 2 x 4 mm² sol / f
- with elastic membranes, which can be removed for cable entry via cable glands, sealing range 9.0-17.0 mm
- with one cable entry in the bottom, sealing range Ø 6.0-15.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included



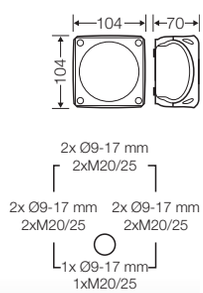
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	20 A
tightening torque for terminal	0.5 Nm
material	PP (polypropylene)

DK 0404 G NEW

1.5-4 mm², Cu 3~

IP 66

- terminal with 2 clamping units per pole
- 5-pole per pole 8 x 1,5 mm² sol / f, 6 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 2 x 6 mm² sol / f
- with elastic membranes, which can be removed for cable entry via cable glands, sealing range 9.0-17.0 mm
- with one cable entry in the bottom, sealing range Ø 6.0-15.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included



rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	32 A
tightening torque for terminal	0.7 Nm
material	PP (polypropylene)

DK Cable junction boxes

For normal environment and protected outdoor
Cable entry via integrated elastic membranes or metric knockouts

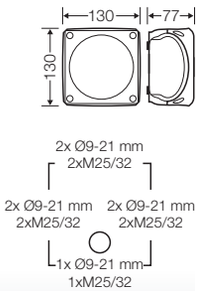
DK 0604 G NEW

1.5-4 mm², Cu 3~

- terminal with 2 clamping units per pole
- 5-pole per pole 8 x 1,5 mm² sol / f, 6 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 2 x 6 mm² sol / f
- with elastic membranes, which can be removed for cable entry via cable glands, sealing range 9.0-21.0 mm
- with one cable entry in the bottom, sealing range Ø 9.0-20.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	32 A
tightening torque for terminal	0.7 Nm
material	PP (polypropylene)

IP 66



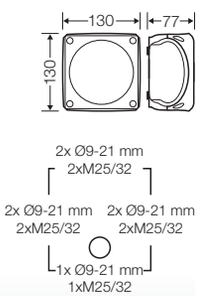
DK 0606 G NEW

2.5-6 mm², Cu 3~

- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 4 x 6 mm² sol / f, 2 x 10 mm² sol / f
- with elastic membranes, which can be removed for cable entry via cable glands, sealing range 9.0-21.0 mm
- with one cable entry in the bottom, sealing range Ø 9.0-20.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	40 A
tightening torque for terminal	1.5 Nm
material	PP (polypropylene)

IP 66



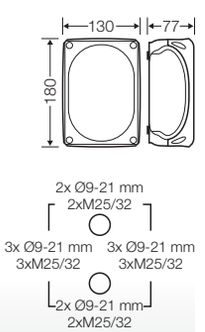
DK 1006 G NEW

2.5-6 mm², Cu 3~

- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 4 x 6 mm² sol / f, 2 x 10 mm² sol / f
- with elastic membranes, which can be removed for cable entry via cable glands, sealing range 9.0-21.0 mm
- with two cable entries in the bottom, sealing range Ø 9.0-20.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	40 A
tightening torque for terminal	1.5 Nm
material	PP (polypropylene)

IP 66



DK Cable junction boxes

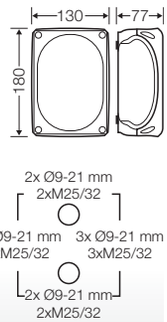
For normal environment and protected outdoor
Cable entry via integrated elastic membranes or metric knockouts

DK 1010 G NEW

4-10 mm², Cu 3~

IP 66

- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 2.5 mm² sol, 4 x 4 mm² sol, 4 x 6 mm² sol, 4 x 10 mm² sol, 2 x 16 mm² s
- with elastic membranes, which can be removed for cable entry via cable glands, sealing range 9.0-21.0 mm
- with two cable entries in the bottom, sealing range Ø 9.0-20.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included



rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	63 A
tightening torque for terminal	2.0 Nm
material	PP (polypropylene)

DK Cable junction boxes

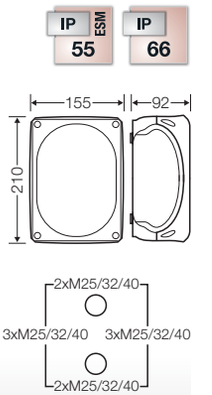
For normal environment and protected outdoor installation
Cable entry via metric knockouts

DK 1610 G NEW

4-10 mm², Cu 3~

- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 2.5 mm² sol, 4 x 4 mm² sol, 4 x 6 mm² sol, 4 x 10 mm² sol, 2 x 16 mm² s
- included cable entry: 3 ESM 40, sealing range Ø 17-30 mm
- with two cable entries M 32 from the rear side
- lid fasteners sealable without accessories
- external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	63 A
tightening torque for terminal	2.0 Nm
material	PC (polycarbonate)

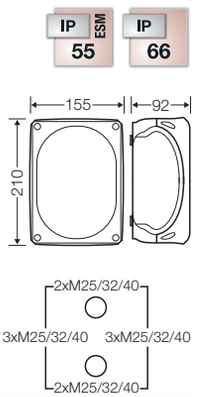


DK 1616 G NEW

10-16 mm², Cu 3~

- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 6 mm² sol, 6 x 10 mm² sol/ f*, 4 x 16 mm² s/ f*, 4 x 25 mm² s/ f*, 2 x 35 mm² s/ f*
  f* = with gas-tight end ferrule
- included cable entry: 3 ESM 40, sealing range Ø 17-30 mm
- with two cable entries M 32 from the rear side
- lid fasteners sealable without accessories
- external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	102 A
tightening torque for terminal	3.0 Nm
material	PC (polycarbonate)

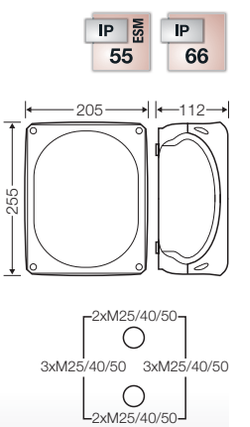


DK 2525 G NEW

10-25 mm², Cu 3~

- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 6 mm² sol, 6 x 10 mm² sol/ f*, 4 x 16 mm² s/ f*, 4 x 25 mm² s/ f*, 2 x 35 mm² s/ f*
  f* = with gas-tight end ferrule
- included cable entry: 3 ESM 40, sealing range Ø 17-30 mm
- with two cable entries M 32 from the rear side
- lid fasteners sealable without accessories
- external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	102 A
tightening torque for terminal	3.0 Nm
material	PC (polycarbonate)



DK Cable junction boxes

For normal environment and protected outdoor installation
Cable entry via metric knockouts

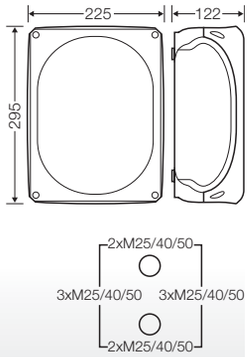
DK 3535 G NEW

16-35 mm², Cu 3~

- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 16 mm² s, 4 x 25 mm² s, 4 x 35 mm² s, 2 x 50 mm² s
- included cable entry: 3 ESM 40, sealing range Ø 17-30 mm
- with two cable entries M 32 from the rear side
- lid fasteners sealable without accessories
- external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	125 A
tightening torque for terminal	12.0 Nm
material	PC (polycarbonate)

IP 55 ESM | IP 66



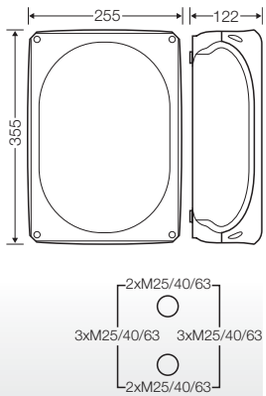
DK 5054 G NEW

16-50 mm², Cu 3~

- terminal with 2 clamping units per pole
- 4-pole per polel 6 x 16 mm² s, 4 x 25 mm² s, 4 x 35 mm² s, 4 x 50 mm² s
- with two cable entries M 32 from the rear side
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- lid fasteners sealable without accessories
- external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	150 A
tightening torque for terminal	12.0 Nm
material	PC (polycarbonate)

IP 66



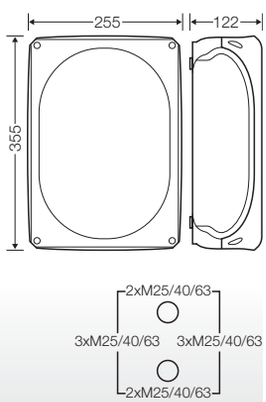
DK 5055 G NEW

16-50 mm², Cu 3~

- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 16 mm² s, 4 x 25 mm² s, 4 x 35 mm² s, 4 x 50 mm² s
- with two cable entries M 32 from the rear side
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- lid fasteners sealable without accessories
- external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	150 A
tightening torque for terminal	12.0 Nm
material	PC (polycarbonate)

IP 66



DK Cable junction boxes

For normal environment and protected outdoor installation
Cable entry via metric knockouts

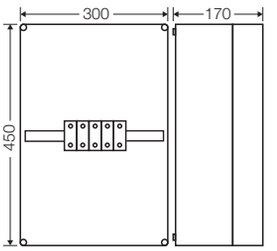
K 7055

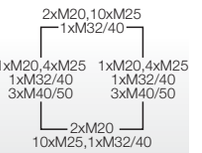
16-50 mm², Cu 3~

- with terminals
- 5-pole per pole 6 x 16 mm² s, 4 x 25 mm² s, 4 x 35 mm² s, 4 x 50 mm² s
- sealable
- order cable glands, flanges and other accessories separately as required
- for normal environment and protected outdoor

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	150 A
tightening torque for terminal	12.0 Nm
material	PC (polycarbonate)

IP 65





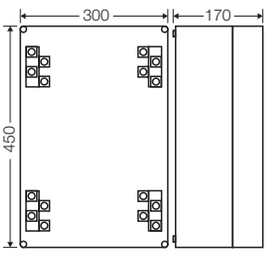
K 7004

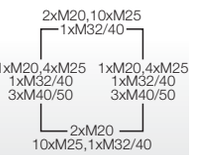
16-70 mm², Cu 3~

- with terminals
- 4-pole per pole 4 x 16-70 mm² s
- sealable
- order cable glands, flanges and other accessories separately as required
- for normal environment and protected outdoor

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	216 A
tightening torque for terminal	10.0 Nm
material	PC (polycarbonate)

IP 65





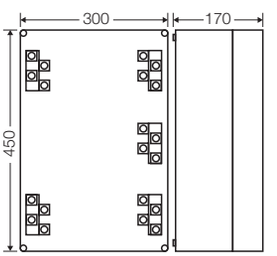
K 7005

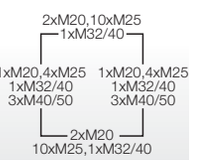
16-70 mm², Cu 3~

- with terminals
- 5-pole per polel 4 x 16-70 mm² s
- sealable
- order cable glands, flanges and other accessories separately as required
- for normal environment and protected outdoor

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	216 A
tightening torque for terminal	10.0 Nm
material	PC (polycarbonate)

IP 65





DK Cable junction boxes

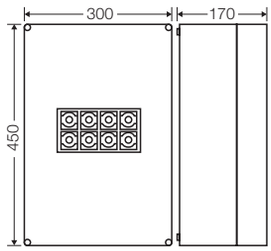
For normal environment and protected outdoor installation
Cable entry via metric knockouts

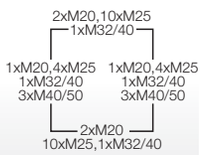
K 1204

16-150 mm², Cu/Alu 3~

IP 65

- with terminals
- 4-pole per pole 2 x 16-150 mm², 4 x 16-70 mm², conductors can be inserted from the front into the clamping unit, terminal technology, see annex DK Cable junction boxes
- sealable
- order cable glands, flanges and other accessories separately as required
- before connecting, aluminum conductors must be pre-treated according to the appropriate technical recommendations, see technical information aluminum conductors
- for normal environment and protected outdoor





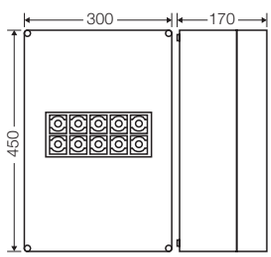
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	250 A
tightening torque for terminal	20.0 Nm
material	PC (polycarbonate)

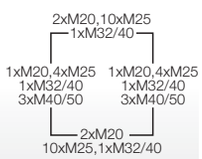
K 1205

16-150 mm², Cu/Alu 3~

IP 65

- with terminals
- 5-pole per pole 2 x 16-150 mm², 4 x 16-70 mm², conductors can be inserted from the front into the clamping unit, terminal technology, see annex DK Cable junction boxes
- sealable
- order cable glands, flanges and other accessories separately as required
- before connecting, aluminum conductors must be pre-treated according to the appropriate technical recommendations, see technical information aluminum conductors
- for normal environment and protected outdoor





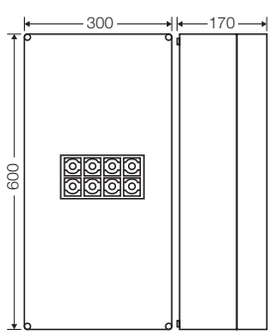
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	250 A
tightening torque for terminal	20.0 Nm
material	PC (polycarbonate)

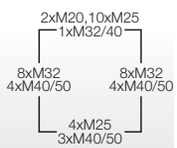
K 2404

25-240 mm², Cu/Alu 3~

IP 65

- with terminals
- 4-pole per pole 2 x 25-185/240 mm², 4 x 25-120 mm², conductors can be inserted from the front into the clamping unit, terminal technology, see annex DK Cable junction boxes
- sealable
- order cable glands, flanges and other accessories separately as required
- before connecting, aluminum conductors must be pre-treated according to the appropriate technical recommendations, see technical information aluminum conductors
- for normal environment and protected outdoor





rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	400 A
tightening torque for terminal	40.0 Nm
material	PC (polycarbonate)

ENYCASE®

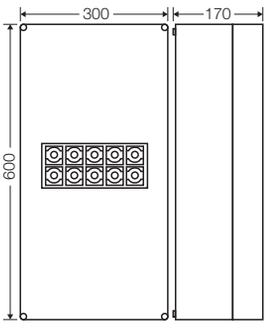
DK Cable junction boxes

For normal environment and protected outdoor installation
Cable entry via metric knockouts

K 2405

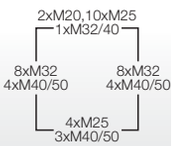
25-240 mm², Cu/Alu 3~

IP 65



- with terminals
- 5-pole per pole 2 x 25-185/240 mm², 4 x 25-120 mm², conductors can be inserted from the front into the clamping unit, terminal technology, see annex DK Cable junction boxes
- sealable
- order cable glands, flanges and other accessories separately as required
- before connecting, aluminum conductors must be pre-treated according to the appropriate technical recommendations, see technical information aluminum conductors
- for normal environment and protected outdoor

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	400 A
tightening torque for terminal	40.0 Nm
material	PC (polycarbonate)



DK Cable junction boxes

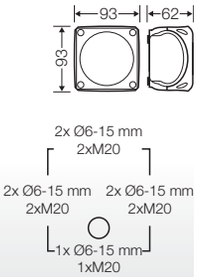
For normal environment and protected outdoor
Cable entry via integrated elastic membranes or metric knockouts

DK 0200 G NEW

IP 66

- without terminals
- with integrated elastic membranes, which can be removed for cable entry via cable glands, sealing range 6.0-15.0 mm
- with one cable entry in the bottom, sealing range Ø 6.0-13.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

material	PP (polypropylene)

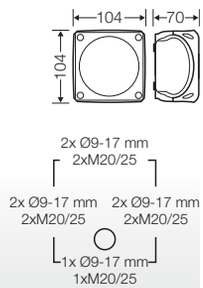


DK 0400 G NEW

IP 66

- without terminals
- with elastic membranes, which can be removed for cable entry via cable glands, sealing range 9.0-17.0 mm
- with one cable entry in the bottom, sealing range Ø 6.0-15.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

material	PP (polypropylene)

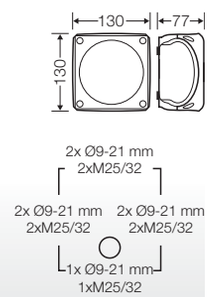


DK 0600 G NEW

IP 66

- without terminals
- with elastic membranes, which can be removed for cable entry via cable glands, sealing range 9.0-21.0 mm
- with one cable entry in the bottom, sealing range Ø 9.0-20.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

material	PP (polypropylene)

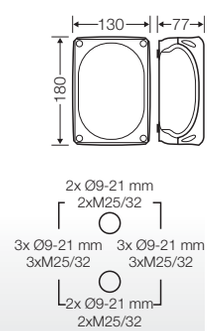


DK 1000 G NEW

IP 66

- without terminals
- with elastic membranes, which can be removed for cable entry via cable glands, sealing range 9.0-21.0 mm
- with two cable entries in the bottom, sealing range Ø 9.0-20.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

material	PP (polypropylene)



DK Cable junction boxes

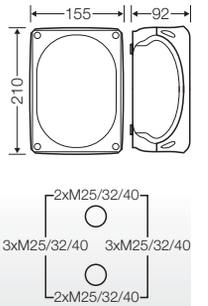
For normal environment and protected outdoor installation
Cable entry via metric knockouts

DK 1600 G NEW

IP 55 ESM IP 66

- without terminals
- included cable entry: 3 ESM 40, sealing range Ø 17-30 mm
- with two cable entries M 32 from the rear side
- lid fasteners sealable without accessories
- external brackets for wall fixing included

material	PC (polycarbonate)

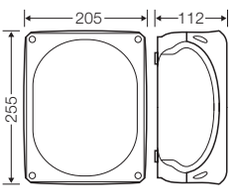


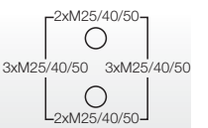
DK 2500 G NEW

IP 55 ESM IP 66

- without terminals
- included cable entry: 3 ESM 40, sealing range Ø 17-30 mm
- with two cable entries M 32 from the rear side
- lid fasteners sealable without accessories
- external brackets for wall fixing included

material	PC (polycarbonate)



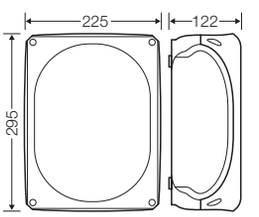


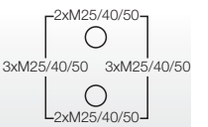
DK 3500 G NEW

IP 55 ESM IP 66

- without terminals
- included cable entry: 3 ESM 40, sealing range Ø 17-30 mm
- with two cable entries M 32 from the rear side
- lid fasteners sealable without accessories
- external brackets for wall fixing included

material	PC (polycarbonate)



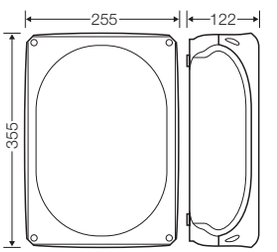


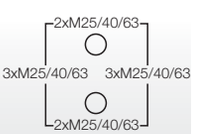
DK 5000 G NEW

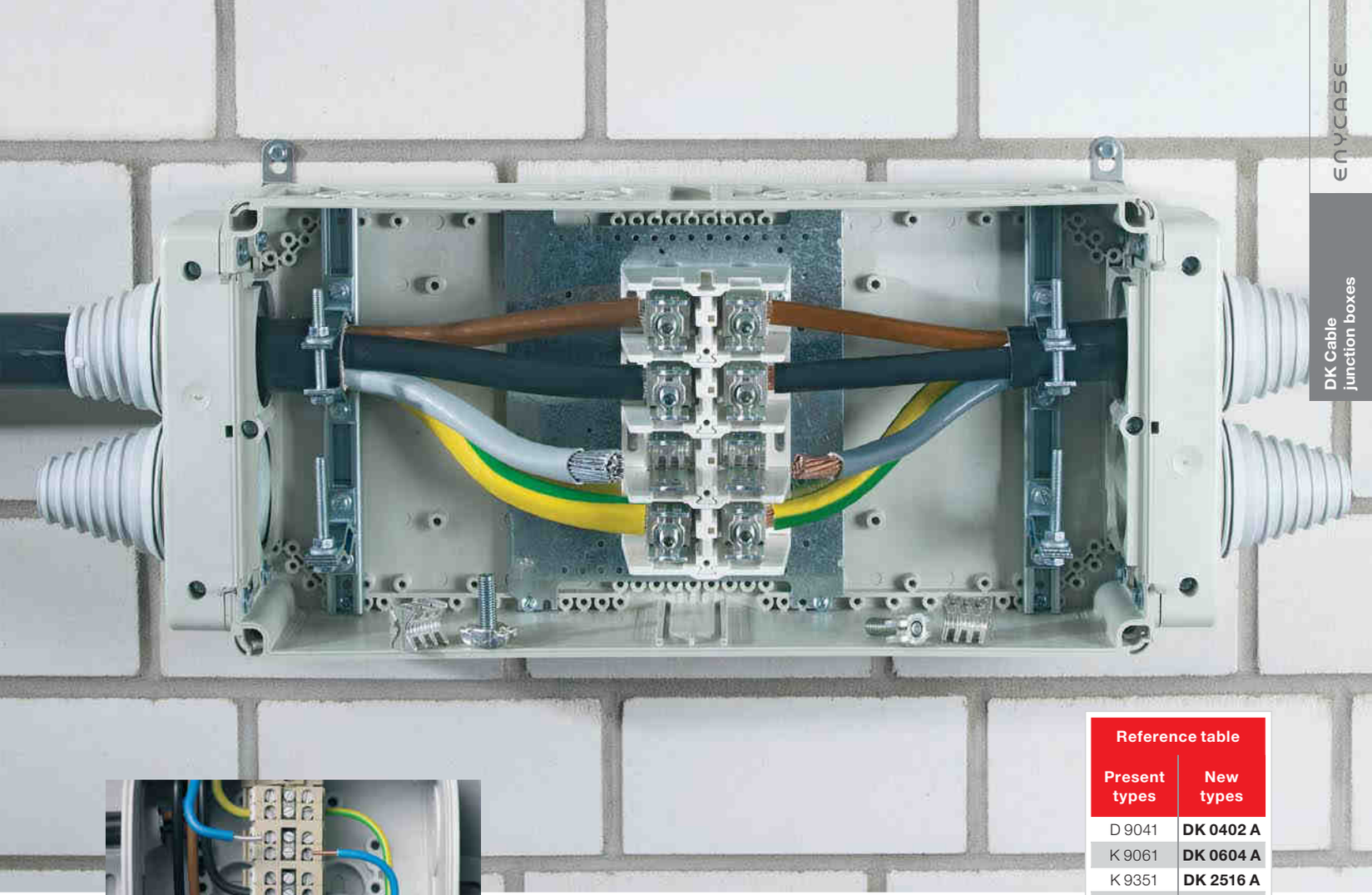
IP 66

- without terminals
- with two cable entries M 32 from the rear side
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- lid fasteners sealable without accessories
- external brackets for wall fixing included

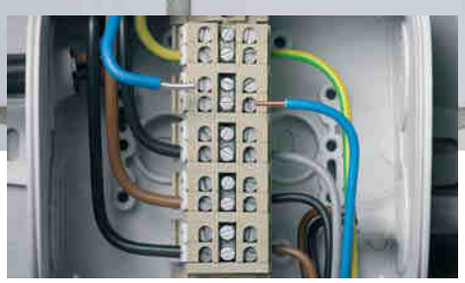
material	PC (polycarbonate)





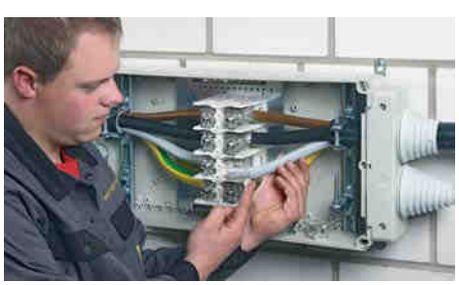


Reference table	
Present types	**New types**
D 9041	**DK 0402 A**
K 9061	**DK 0604 A**
K 9351	**DK 2516 A**
KF 9251	**KF 3550 A**
KF 9501	**KF 5050 A**



DK Cable junction boxes

For normal environment and protected outdoor
With terminals for aluminum and copper conductors



- Separate clamping units for aluminum and copper conductors
- Degree of protection IP 66, In the case of twisted cables IP 54 using cable glands
- Labelling system: label template in the Internet at www.hensel-electric.de - downloads
- Material: polypropylene or polycarbonate
- Burning behaviour:
  Glow wire test in accordance with IEC 60695-2-11: 750 °C / 960 °C, flame-retardant, self-extinguishing
- Colour: grey, RAL 7035
- Before connecting, aluminum conductors must be pre-treated according to the appropriate technical recommendations, see technical information aluminum conductors

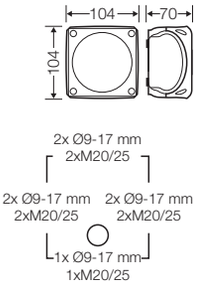
DK Cable junction boxes

With terminal blocks for aluminum and copper conductors
Cable entry via integrated elastic membranes or metric knockouts

DK 0402 A NEW

1.5-2.5 mm², Cu/Alu 3~

IP 66



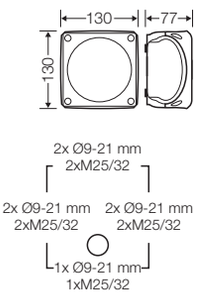
- with terminals
- 5-pole per polel 4 x 1.5 mm² sol/f, 4 x 2.5 mm² sol/f, conductors are inserted into the screw-type terminal, terminal technology, see annex DK Cable junction boxes
- with elastic membranes, which can be removed for cable entry via cable glands, sealing range 9.0-17.0 mm
- to achieve the degree IP 54 with twisted cables, it is absolutely necessary to use cable glands
- with one cable entry in the bottom, sealing range Ø 6.0-15.0 mm
- lid fasteners sealable without accessories
- before connecting, aluminum conductors must be pre-treated according to the appropriate technical recommendations, see technical information aluminum conductors
- retaining strap and external brackets for wall fixing included

rated insulation voltage	U_i = 250 V a.c./d.c.
current carrying capacity	20 A
tightening torque for terminal	0.5 Nm
material	PP (polypropylene)

DK 0604 A NEW

1.5-4 mm², Cu/Alu 3~

IP 66



- with terminals
- 5-pole per pole 4 x 1.5 mm² sol/f, 4 x 2.5 mm² sol/f, 4 x 4 mm² sol/f, conductors are inserted into the screw-type terminal, terminal technology, see annex DK Cable junction boxes
- with elastic membranes, which can be removed for cable entry via cable glands, sealing range 9.0-21.0 mm
- to achieve the degree IP 54 with twisted cables, it is absolutely necessary to use cable glands
- with one cable entry in the bottom, sealing range Ø 9.0-20.0 mm
- lid fasteners sealable without accessories
- before connecting, aluminum conductors must be pre-treated according to the appropriate technical recommendations, see technical information aluminum conductors
- retaining strap and external brackets for wall fixing included

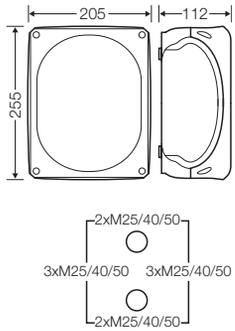
rated insulation voltage	U_i = 400 V a.c./d.c.
current carrying capacity	20 A
tightening torque for terminal	0.7 Nm
material	PP (polypropylene)

DK Cable junction boxes

With terminals for aluminum and copper conductors
Cable entry via metric knockouts

DK 2516 A NEW

6-16 mm², Cu/Alu 3~

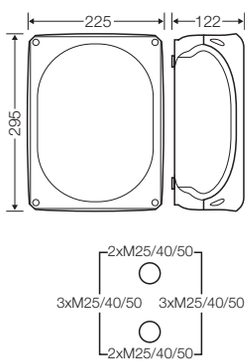


- with terminals
- 5-pole per polel 4 x 6 mm² sol/f, 4 x 10 mm² sol/f, 4 x 16 mm² sol/s/f, conductors are inserted into the screw-type terminal, terminal technology, see annex DK Cable junction boxes
- included cable entry: 3 ESM 40, sealing range Ø 17-30 mm
- with two cable entries M 32 from the rear side
- lid fasteners sealable without accessories
- before connecting, aluminum conductors must be pre-treated according to the appropriate technical recommendations, see technical information aluminum conductors
- external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	76 A
tightening torque for terminal	3.0 Nm
material	PC (polycarbonate)

KF 3550 A NEW

1.5-50 mm², Cu/Alu 3~



- with connecting terminal
- 5-pole per pole 2 x 1 x 1.5-50 mm², conductors are inserted into the screw-type terminal, terminal technology, see annex DK Cable junction boxes
- included cable entry: 2 EDK 40, sealing range Ø 11-30 mm, IP 65
- degree of protection IP 66 / IP 67 / IP 69, order cable glands AKM separately (see cable entry systems LES)
- with two cable entries M 32 from the rear side
- before connecting, aluminum conductors must be pre-treated according to the appropriate technical recommendations, see technical information aluminum conductors
- lid fasteners sealable without accessories
- external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	
tightening torque for terminal	1.5 Nm 1.5-2.5 mm² 5.0 Nm 4-10 mm²
material	PC-GFS (polycarbonate)

Before connecting, aluminum conductors must be pre-treated according to the appropriate technical recommendations

Conductor ends need to have the oxide layer carefully scraped clean.

Conductor ends need to be rubbed with aan acid and alkali free grease and immediately connected

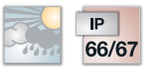
The terminals need to be tightened with the appropriate torque

DK Cable junction boxes

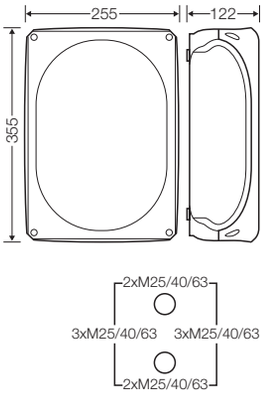
With terminals for aluminum and copper conductors
Cable entry via metric knockouts

KF 5050 A NEW

1.5-50 mm², Cu/Alu 3~



- with connecting terminal
- 5-pole per pole 2 x 1 x 1.5-50 mm², conductors are inserted into the screw-type terminal, terminal technology, see annex DK Cable junction boxes
- included cable entry: 2 EDK 40, sealing range Ø 11-30 mm, IP 65
- degree of protection IP 66 / IP 67 / IP 69, order cable glands AKM separately (see cable entry systems LES)
- with two cable entries M 32 from the rear side
- before connecting, aluminum conductors must be pre-treated according to the appropriate technical recommendations, see technical information aluminum conductors
- lid fasteners sealable without accessories
- external brackets for wall fixing included

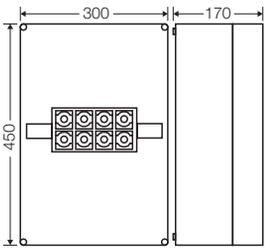


rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	
tightening torque for terminal	1.5 Nm 1.5-2.5 mm² 5.0 Nm 4-10 mm²
material	PC-GFS (polycarbonate)

K 7051 NEW

2.5-50 mm², Cu/Alu 3~

- with terminals
- 5-pole per pole 4 x 2.5-50 mm², conductors are inserted into the screw-type terminal, terminal technology, see annex DK Cable junction boxes
- sealable
- order cable glands, flanges and other accessories separately as required
- before connecting, aluminum conductors must be pre-treated according to the appropriate technical recommendations, see technical information aluminum conductors
- for normal environment and protected outdoor

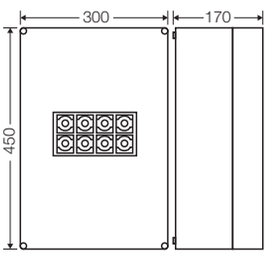


rated insulation voltage	U_i = 750 V a.c./d.c.
current carrying capacity	copper, 150 A Al, 120 A
tightening torque for terminal	10.0 Nm
material	PC (polycarbonate)

K 7042

10-95 mm² Cu/Alu 3~

- with terminals
- 4-pole per pole 2 x 10-95 mm², conductors can be inserted from the front into the clamping unit, terminal technology, see annex DK Cable junction boxes
- sealable
- order cable glands, flanges and other accessories separately as required
- before connecting, aluminum conductors must be pre-treated according to the appropriate technical recommendations, see technical information aluminum conductors
- for normal environment and protected outdoor



rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	160 A
tightening torque for terminal	20.0 Nm
material	PC (polycarbonate)

DK Cable junction boxes

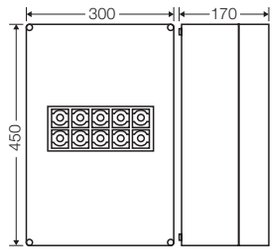
With terminals for aluminum and copper conductors
Cable entry via metric knockouts

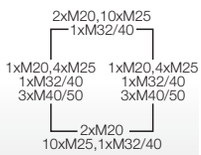
K 7052

10-95 mm² Cu/Alu 3~

IP 65

- with terminals
- 5-pole per pole 2 x 10-95 mm², conductors can be inserted from the front into the clamping unit, terminal technology, see annex DK Cable junction boxes
- sealable
- order cable glands, flanges and other accessories separately as required
- before connecting, aluminum conductors must be pre-treated according to the appropriate technical recommendations, see technical information aluminum conductors
- for normal environment and protected outdoor





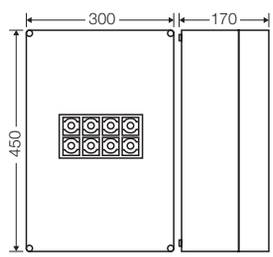
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	160 A
tightening torque for terminal	20.0 Nm
material	PC (polycarbonate)

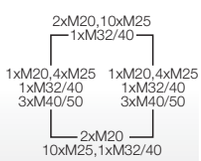
K 1204

16-150 mm², Cu/Alu 3~

IP 65

- with terminals
- 4-pole per pole 2 x 16-150 mm², 4 x 16-70 mm², conductors can be inserted from the front into the clamping unit, terminal technology, see annex DK Cable junction boxes
- sealable
- order cable glands, flanges and other accessories separately as required
- before connecting, aluminum conductors must be pre-treated according to the appropriate technical recommendations, see technical information aluminum conductors
- for normal environment and protected outdoor





rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	250 A
tightening torque for terminal	20.0 Nm
material	PC (polycarbonate)

Before connecting, aluminum conductors must be pre-treated according to the appropriate technical recommendations

Conductor ends need to have the oxide layer carefully scraped clean.

Conductor ends need to be rubbed with aan acid and alkali free grease and immediately connected

The terminals need to be tightened with the appropriate torque

DK Cable junction boxes

With terminals for aluminum and copper conductors
Cable entry via metric knockouts

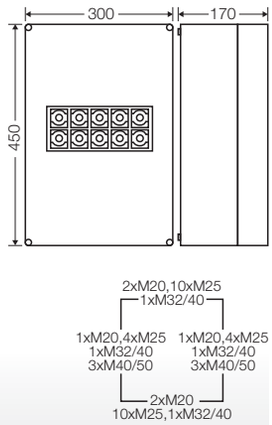
K 1205

16-150 mm², Cu/Alu 3~

IP 65

- with terminals
- 5-pole per pole 2 x 16-150 mm², 4 x 16-70 mm², conductors can be inserted from the front into the clamping unit, terminal technology, see annex DK Cable junction boxes
- sealable
- order cable glands, flanges and other accessories separately as required
- before connecting, aluminum conductors must be pre-treated according to the appropriate technical recommendations, see technical information aluminum conductors
- for normal environment and protected outdoor

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	250 A
tightening torque for terminal	20.0 Nm
material	PC (polycarbonate)



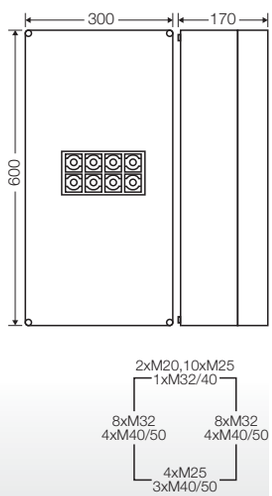
K 2404

25-240 mm², Cu/Alu 3~

IP 65

- with terminals
- 4-pole per pole 2 x 25-185/240 mm², 4 x 25-120 mm², conductors can be inserted from the front into the clamping unit, terminal technology, see annex DK Cable junction boxes
- sealable
- order cable glands, flanges and other accessories separately as required
- before connecting, aluminum conductors must be pre-treated according to the appropriate technical recommendations, see technical information aluminum conductors
- for normal environment and protected outdoor

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	400 A
tightening torque for terminal	40.0 Nm
material	PC (polycarbonate)



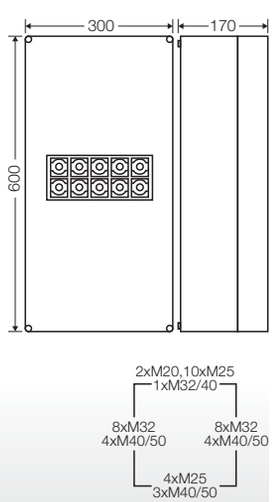
K 2405

25-240 mm², Cu/Alu 3~

IP 65

- with terminals
- 5-pole per pole 2 x 25-185/240 mm², 4 x 25-120 mm², conductors can be inserted from the front into the clamping unit, terminal technology, see annex DK Cable junction boxes
- sealable
- order cable glands, flanges and other accessories separately as required
- before connecting, aluminum conductors must be pre-treated according to the appropriate technical recommendations, see technical information aluminum conductors
- for normal environment and protected outdoor

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	400 A
tightening torque for terminal	40.0 Nm
material	PC (polycarbonate)



DK Cable junction boxes

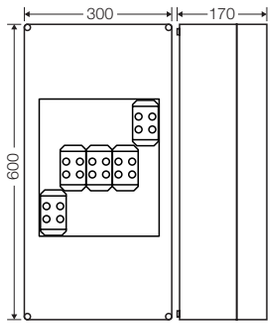
With terminals for aluminum and copper conductors
Cable entry via metric knockouts

K 2401

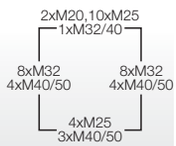
35-240 mm², Cu/Alu 3~

IP 65

- with terminals
- 5-pole per pole 4 x 35-240 mm², conductors are inserted into the screw-type terminal, terminal technology, see annex DK Cable junction boxes
- sealable
- order cable glands, flanges and other accessories separately as required
- before connecting, aluminum conductors must be pre-treated according to the appropriate technical recommendations, see technical information aluminum conductors
- for normal environment and protected outdoor



rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	
tightening torque for terminal	26.0 Nm 35-120 mm²
material	PC (polycarbonate)



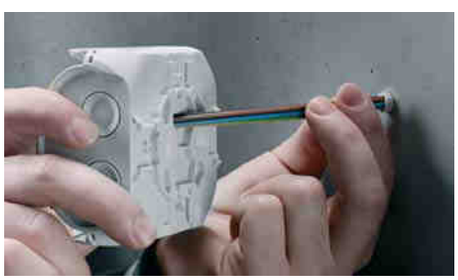
Before connecting, aluminum conductors must be pre-treated according to the appropriate technical recommendations

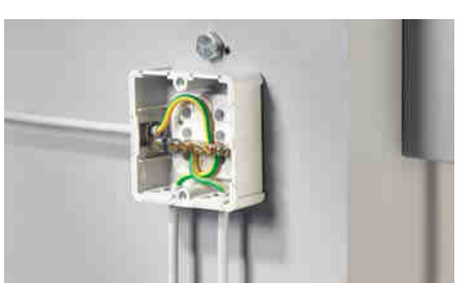
Conductor ends need to have the oxide layer carefully scraped clean.

Conductor ends need to be rubbed with aan acid and alkali free grease and immediately connected

The terminals need to be tightened with the appropriate torque

Reference table	
Present types	**New types**
D 9220	**DK 0200 R**
D 9225	**DK 0202 R** **DK 0402 R**
D 9240	**DK 0400 R**
D 9245	**DK 0404 R** **DK 0604 R**





DK Cable junction boxes

for safety lighting circuits, for equipotential bonding conductors

Cable entry via integrated elastic membranes or metric knockouts

- Cable junction box with red lid for safety lighting circuits
- With elastic membrane, which can be removed for cable entry via cable glands
- Multi-level knockouts for cable glands in different sizes
- Cable entry through the bottom of the box via integrated elastic membrane
- Closes quickly by a quarter turn - locked position well visible (open - locked)
- Lid fasteners sealable without accessories
- External brackets for wall fixing included
- Retaining strap, details see product description
- High-position terminals with more space for wiring
- All terminals with two clamping units per pole
- Every pole allows the connection of various conductor cross sections and conductor types
- Terminals prevent damage of conductors, also with flexible conductors without ferrule
- Different terminal positions and fastening options
- Material: polypropylene or polystyrene
- Burning behaviour: glow wire test in accordance with IEC 60695-2-11: 750 °C, flame-retardant, self-extinguishing
- Colour: grey RAL 7035, with red lid RAL 3000
- Terminal box for equipotential bonding cables

DK Cable junction boxes

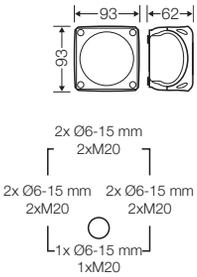
For safety lighting circuits
Cable entry via integrated elastic membranes or metric knockouts

DK 0202 R NEW

1.5-2.5 mm², Cu 3~

- terminal with 2 clamping units per pole
- 5-pole per pole 8 x 0,75 mm² f, 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 2 x 4 mm² sol / f
- with red lid RAL 3000
- for safety lighting circuits
- with integrated elastic membranes, which can be removed for cable entry via cable glands, sealing range 6.0-15.0 mm
- with one cable entry in the bottom, sealing range Ø 6.0-13.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

IP 66



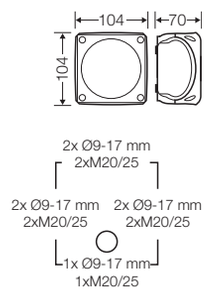
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	20 A
tightening torque for terminal	0.5 Nm
material	PP (polypropylene)

DK 0402 R NEW

1.5-2.5 mm², Cu 3~

- terminal with 2 clamping units per pole
- 5-pole per pole 8 x 0,75 mm² f, 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 2 x 4 mm² sol / f
- with red lid RAL 3000
- for safety lighting circuits
- with elastic membranes, which can be removed for cable entry via cable glands, sealing range 9.0-17.0 mm
- with one cable entry in the bottom, sealing range Ø 6.0-15.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

IP 66



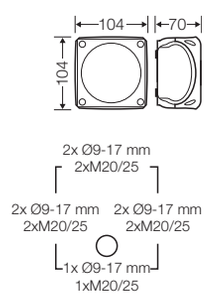
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	20 A
tightening torque for terminal	0.5 Nm
material	PP (polypropylene)

DK 0404 R NEW

1.5-4 mm², Cu 3~

- terminal with 2 clamping units per pole
- 5-pole per pole 8 x 1,5 mm² sol / f, 6 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 2 x 6 mm² sol / f
- with red lid RAL 3000
- for safety lighting circuits
- with elastic membranes, which can be removed for cable entry via cable glands, sealing range 9.0-17.0 mm
- with one cable entry in the bottom, sealing range Ø 6.0-15.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

IP 66



rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	32 A
tightening torque for terminal	0.7 Nm
material	PP (polypropylene)

ENYCASE®

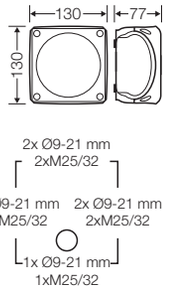
DK Cable junction boxes

For safety lighting circuits
Cable entry via integrated elastic membranes or metric knockouts

DK 0604 R NEW

1.5-4 mm², Cu 3~

IP 66



- terminal with 2 clamping units per pole
- 5-pole per pole 8 x 1,5 mm² sol / f, 6 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 2 x 6 mm² sol / f
- with red lid RAL 3000
- for safety lighting circuits
- with elastic membranes, which can be removed for cable entry via cable glands, sealing range 9.0-21.0 mm
- with one cable entry in the bottom, sealing range Ø 9.0-20.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	32 A
tightening torque for terminal	0.7 Nm
material	PP (polypropylene)

DK Cable junction boxes

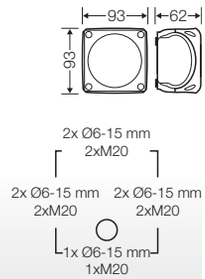
For safety lighting circuits
Cable entry via integrated elastic membranes or metric knockouts

DK 0200 R NEW

IP 66

- without terminals
- with red lid RAL 3000
- for safety lighting circuits
- with integrated elastic membranes, which can be removed for cable entry via cable glands, sealing range 6.0-15.0 mm
- with one cable entry in the bottom, sealing range Ø 6.0-13.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

material	PP (polypropylene)

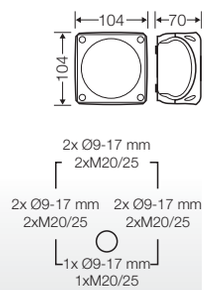


DK 0400 R NEW

IP 66

- without terminals
- with red lid RAL 3000
- for safety lighting circuits
- with elastic membranes, which can be removed for cable entry via cable glands, sealing range 9.0-17.0 mm
- with one cable entry in the bottom, sealing range Ø 6.0-15.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

material	PP (polypropylene)



ENYCASE®

DK Cable junction boxes

For equipotential bonding conductors
Cable entry via removable grommets

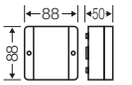
DP 9026

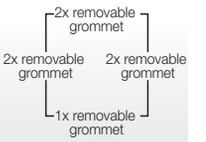
4-25 mm² / 4-10 mm², Cu

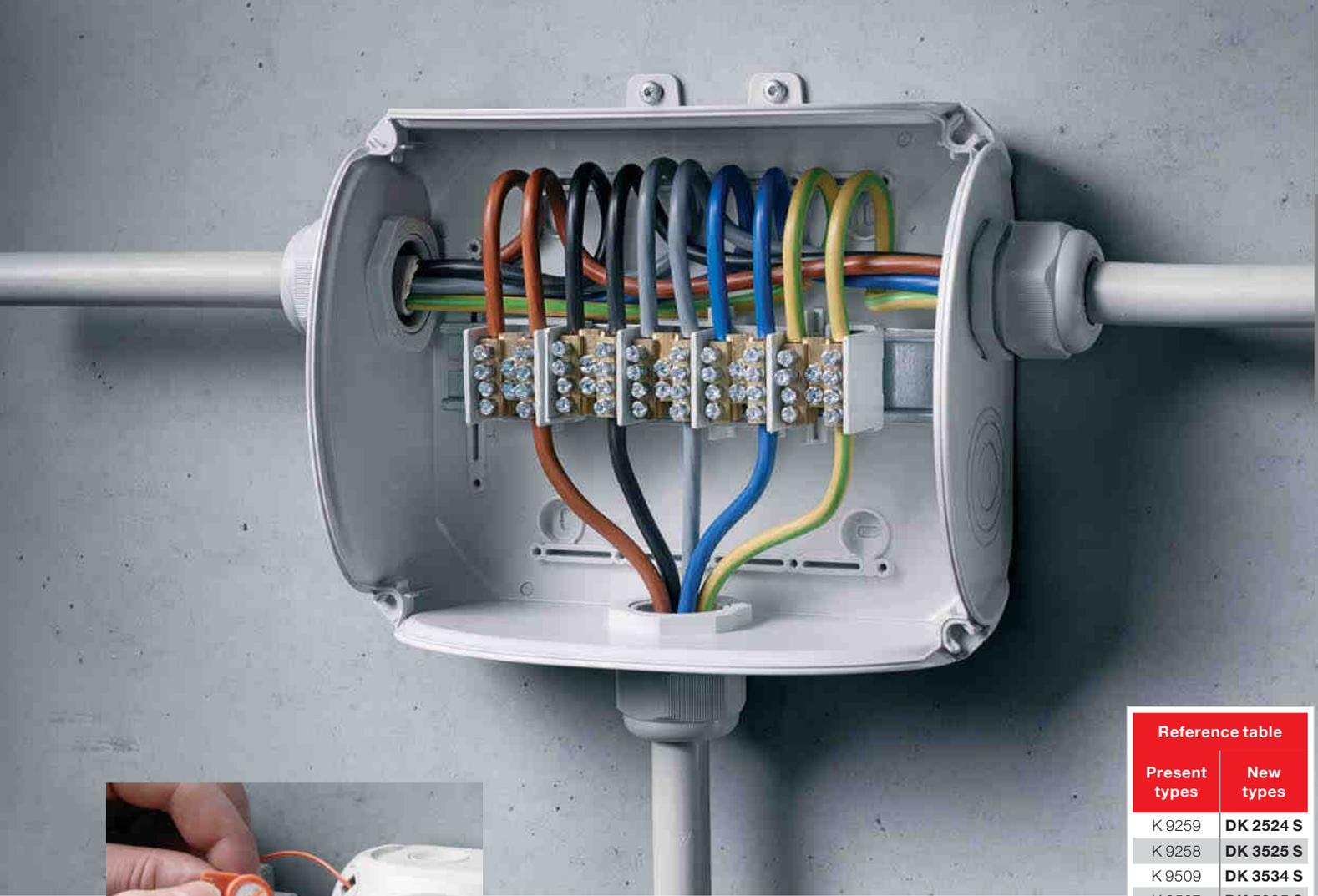
- with terminals
- 1-pole 1 x 4-25 mm², 5 x 4-10 mm² (16 mm² sol)
- for equipotential bonding cables
- included cable entry: 4 DPS 02, sealing range Ø 10-13,5 mm
- for normal environment and protected outdoor

material	PS (Polystyrene)

IP 54







Reference table	
Present types	**New types**
K 9259	**DK 2524 S**
K 9258	**DK 3525 S**
K 9509	**DK 3534 S**
K 9507	**DK 5035 S**
K 9508	**omitted**
K 9503	**omitted**

DK Cable junction boxes

With main line branch terminal for copper conductors, sealable

Cable entry via metric knockouts

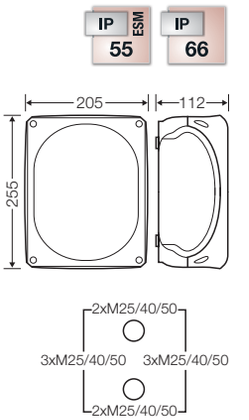
- Multi-level knockouts for cable glands in different sizes
- Cable entry through the bottom of the box via integrated elastic membrane
- Closes quickly by a quarter turn -
  locked position well visible (open - locked)
- lid fasteners sealable without accessories
- external brackets for wall fixing included
- Labelling system for circuit description
- Material: polycarbonate
- Burning behaviour:
  glow wire test in accordance with IEC 60695-2-11: 750 °C,
  flame-retardant, self-extinguishing
- Colour: grey, RAL 7035

DK Cable junction boxes

With main line branch terminals for copper conductors, sealable
Cable entry via metric knockouts

DK 2524 S NEW

6-25 mm², Cu

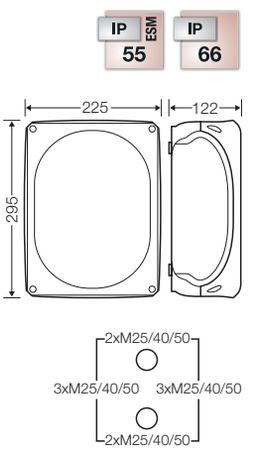


- with main line branch terminals for copper conductors
- 4-pole per pole terminals for incoming cables:
  10-25 mm² r, 6-16 mm² f, with end ferrule,
  terminals for outgoing cables:
  6-16 mm² r, 4-10 mm² with end ferrule
- lid fasteners sealable without accessories
- included cable entry: 3 ESM 40,
  sealing range Ø 17-30 mm
- with two cable entries M 32 from the rear side
- external brackets for wall fixing included

rated insulation voltage	U_i = 400 V a.c.
current carrying capacity	80 A
tightening torque for terminal	3.0 Nm terminals for incoming cables 3.0 Nm terminals for outgoing cables
material	PC (polycarbonate)

DK 3525 S NEW

6-25 mm², Cu



- with main line branch terminals for copper conductors
- 5-pole, per pole terminals for incoming cables 10-25 mm² r,
  6-16 mm² f, with end ferrule,
  terminals for outgoing cables 6-16 mm² r, 4-10 mm² f
  with end ferrule
- lid fasteners sealable without accessories
- included cable entry: 3 ESM 40,
  sealing range Ø 17-30 mm
- with two cable entries M 32 from the rear side
- external brackets for wall fixing included

rated insulation voltage	U_i = 400 V a.c.
current carrying capacity	80 A
tightening torque for terminal	3.0 Nm terminals for incoming cables 3.0 Nm terminals for outgoing cables
material	PC (polycarbonate)

DK Cable junction boxes

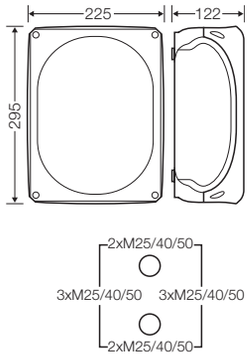
With main line branch terminals for copper conductors, sealable
Cable entry via metric knockouts

DK 3534 S NEW

6-35 mm², Cu

IP 66

- with main line branch terminals for copper conductors
- 4-pole per pole terminals for incoming cables: 16-35 mm² r, 10-25 mm² f, with end ferrule,
  terminals for outgoing cables: 10-25 mm² r, 6-16 mm² f with end ferrule
- lid fasteners sealable without accessories
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- with two cable entries M 32 from the rear side
- external brackets for wall fixing included



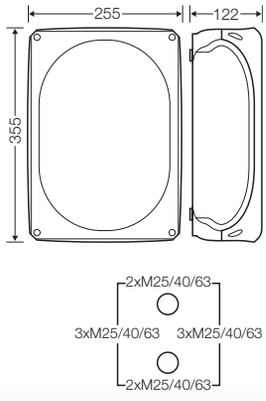
rated insulation voltage	U_i = 400 V a.c.
current carrying capacity	100 A
tightening torque for terminal	4.0 Nm terminals for incoming cables 3.0 Nm terminals for outgoing cables
material	PC (polycarbonate)

DK 5035 S NEW

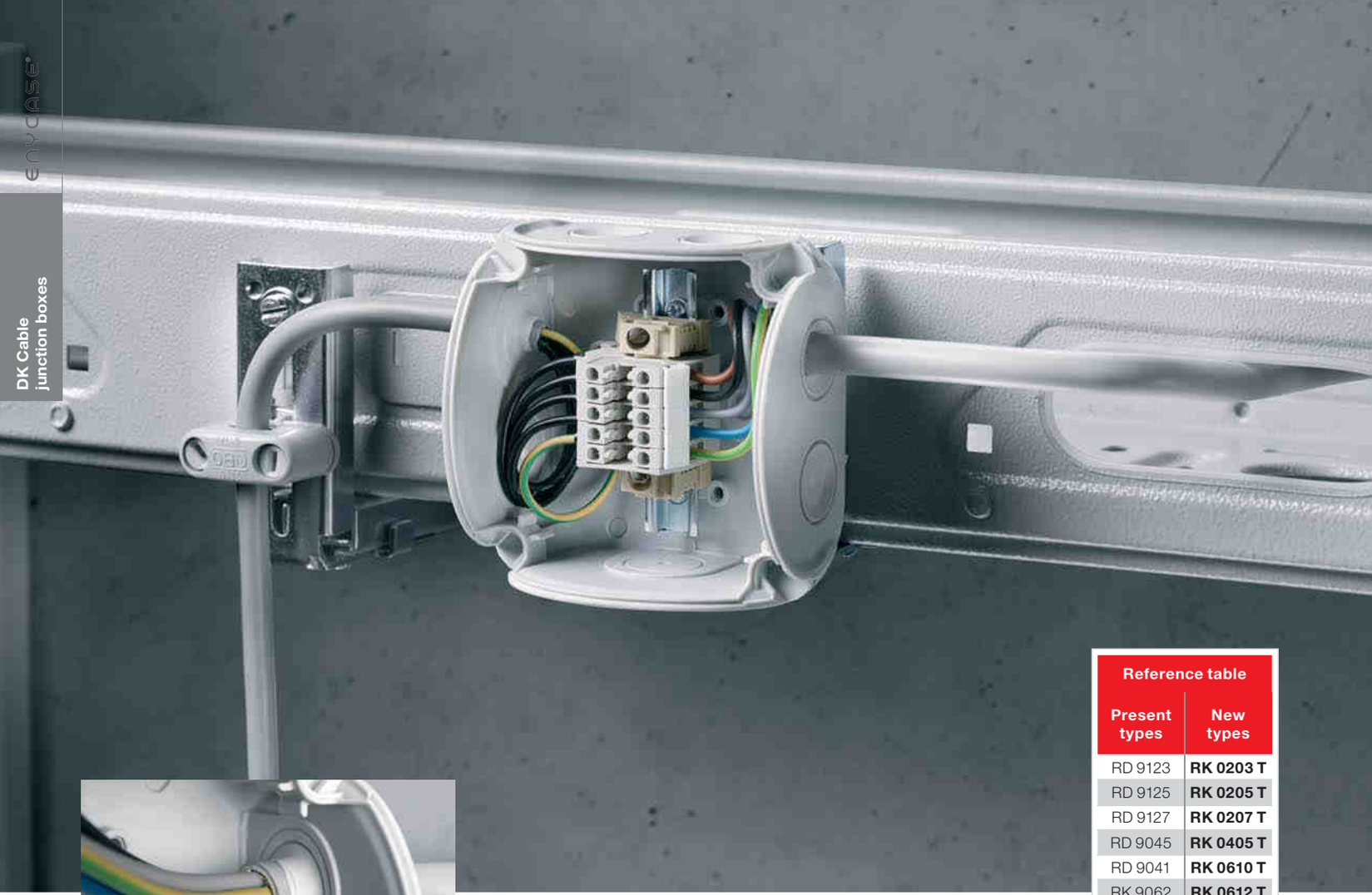
6-35 mm², Cu

IP 66

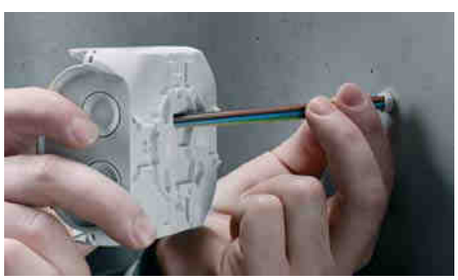
- with main line branch terminals for copper conductors
- 5-pole per pole incoming terminals 16-35 mm² r, 10-25 mm² f, with end ferrule,
  outgoing cables 10-25 mm² r, 6-16 mm² f with end ferrule
- lid fasteners sealable without accessories
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- with two cable entries M 32 from the rear side
- external brackets for wall fixing included



rated insulation voltage	U_i = 400 V a.c.
current carrying capacity	100 A
tightening torque for terminal	4.0 Nm terminals for incoming cables 3.0 Nm terminals for outgoing cables
material	PC (polycarbonate)



Reference table	
Present types	New types
RD 9123	**RK 0203 T**
RD 9125	**RK 0205 T**
RD 9127	**RK 0207 T**
RD 9045	**RK 0405 T**
RD 9041	**RK 0610 T**
RK 9062	**RK 0612 T**
RK 9064	**RK 0614 T**
RK 9109	**RK 1019 T**
RK 9104	**RK 1024 T**



DK Cable junction boxes

With terminal blocks for aluminum and copper conductors

Cable entry via integrated elastic membranes or metric knockouts

- Terminal marking, neutral
- With elastic membrane, which can be removed for cable entry via cable glands
- Multi-level knockouts for cable glands in different sizes
- Cable entry through the bottom of the box via integrated elastic membrane
- Closes quickly by a quarter turn - locked position well visible (open - locked)
- Lid fasteners sealable without accessories
- External brackets for wall fixing included
- Retaining strap, details see product description
- Labelling system for circuit description
- All terminals with two clamping units per pole
- Terminals prevent damage of conductors, also with flexible conductors without ferrule
- Material: polypropylene
- Burning behaviour:
  glow wire test in accordance with IEC 60695-2-11: 750 °C,
  flame-retardant, self-extinguishing
- Colour: grey, RAL 7035

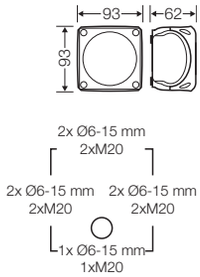
DK Cable junction boxes

With terminal blocks for aluminum and copper conductors
Cable entry via integrated elastic membranes or metric knockouts

RK 0203 T NEW

1.5-2.5 mm²

IP 66



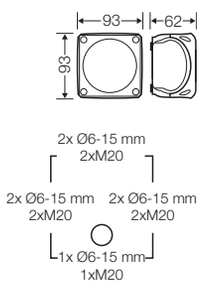
- 3 terminal blocks WKM 2.5/15
- per terminal 2 x 0,5-2,5 mm² f, 2 x 0,5-4 mm² sol or 2 x 1,5-2,5 mm² s, see Technical details for more information about terminal assignment
- terminal blocks, by Wieland
- for aluminium and copper conductors
- terminal marking, neutral
- with integrated elastic membranes, which can be removed for cable entry via cable glands, sealing range 6.0-15.0 mm
- with one cable entry in the bottom, sealing range Ø 6.0-13.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

rated insulation voltage	U_i = 500 V a.c./d.c.
current carrying capacity	24 A
tightening torque for terminal	0,4 Nm
material	PP (polypropylene)

RK 0205 T NEW

1.5-2.5 mm²

IP 66



- 5 terminal blocks WKM 2.5/15
- per terminal 2 x 0,5-2,5 mm² f, 2 x 0,5-4 mm² sol or 2 x 1,5-2,5 mm² s, see Technical details for more information about terminal assignment
- terminal blocks, by Wieland
- for aluminium and copper conductors
- terminal marking, neutral
- with integrated elastic membranes, which can be removed for cable entry via cable glands, sealing range 6.0-15.0 mm
- with one cable entry in the bottom, sealing range Ø 6.0-13.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

rated insulation voltage	U_i = 500 V a.c./d.c.
current carrying capacity	24 A
tightening torque for terminal	0,4 Nm
material	PP (polypropylene)

DK Cable junction boxes

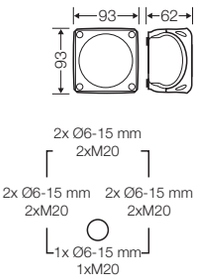
With terminal blocks for aluminum and copper conductors
Cable entry via integrated elastic membranes or metric knockouts

RK 0207 T NEW

1.5-2.5 mm²

- 7 terminal blocks WKM 2.5/15
- per terminal 2 x 0,5-2,5 mm² f, 2 x 0,5-4 mm² sol or 2 x 1,5-2,5 mm² s, see Technical details for more information about terminal assignment
- terminal blocks, by Wieland
- for aluminium and copper conductors
- terminal marking, neutral
- with integrated elastic membranes, which can be removed for cable entry via cable glands, sealing range 6.0-15.0 mm
- with one cable entry in the bottom, sealing range Ø 6.0-13.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

IP 66



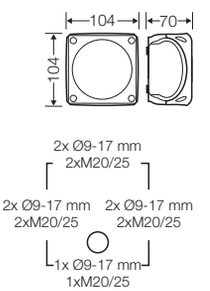
rated insulation voltage	U_i = 500 V a.c./d.c.
current carrying capacity	24 A
tightening torque for terminal	0,4 Nm
material	PP (polypropylene)

RK 0405 T NEW

1.5-4 mm²

- 5 terminal blocks WKM 4/15
- per terminal 2 x 0,5-4 mm² f, 2 x 0,5-6 mm² sol or 2 x 1,5-4 mm² s, see Technical details DK cable junction boxes for more information about terminal assignment
- terminal blocks, by Wieland
- for aluminium and copper conductors
- terminal marking, neutral
- with elastic membranes, which can be removed for cable entry via cable glands, sealing range 9.0-17.0 mm
- with one cable entry in the bottom, sealing range Ø 6.0-15.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

IP 66



rated insulation voltage	U_i = 500 V a.c./d.c.
current carrying capacity	28 A
tightening torque for terminal	0.5 Nm
material	PP (polypropylene)

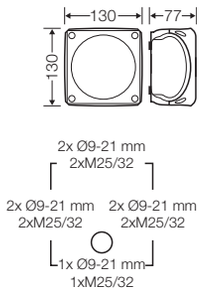
DK Cable junction boxes

With terminal blocks for aluminum and copper conductors
Cable entry via integrated elastic membranes or metric knockouts

RK 0610 T NEW

1.5-4 mm²

IP 66



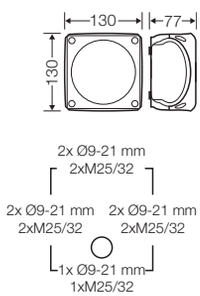
- 10 terminal blocks WK 4/U
- per terminal 2 x 0,5-4 mm² f, 2 x 0,5-6 mm² sol or 2 x 1,5-4 mm² s, see Technical details DK cable junction boxes for more information about terminal assignment
- terminal blocks, by Wieland
- for aluminium and copper conductors
- terminal marking, neutral
- with elastic membranes, which can be removed for cable entry via cable glands, sealing range 9.0-21.0 mm
- with one cable entry in the bottom, sealing range Ø 9.0-20.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	41 A
tightening torque for terminal	0.5 Nm
material	PP (polypropylene)

RK 0612 T NEW

1.5-4 mm²

IP 66



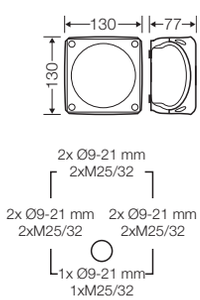
- 12 terminal blocks WK 4/U
- per terminal 2 x 0,5-4 mm² f, 2 x 0,5-6 mm² sol or 2 x 1,5-4 mm² s, see Technical details DK cable junction boxes for more information about terminal assignment
- terminal blocks, by Wieland
- for aluminium and copper conductors
- terminal marking, neutral
- with elastic membranes, which can be removed for cable entry via cable glands, sealing range 9.0-21.0 mm
- with one cable entry in the bottom, sealing range Ø 9.0-20.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	41 A
tightening torque for terminal	0.5 Nm
material	PP (polypropylene)

RK 0614 T NEW

1.5-4 mm²

IP 66



- 14 terminal blocks WK 4/U
- per terminal 2 x 0,5-4 mm² f, 2 x 0,5-6 mm² sol or 2 x 1,5-4 mm² s, see Technical details DK cable junction boxes for more information about terminal assignment
- terminal blocks, by Wieland
- for aluminium and copper conductors
- terminal marking, neutral
- with elastic membranes, which can be removed for cable entry via cable glands, sealing range 9.0-21.0 mm
- with one cable entry in the bottom, sealing range Ø 9.0-20.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	41 A
tightening torque for terminal	0.5 Nm
material	PP (polypropylene)

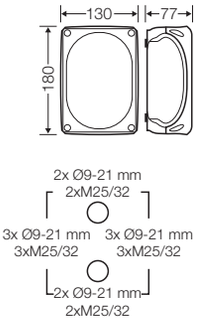
DK Cable junction boxes

with terminal blocks for aluminum and copper conductors, cable entry via integrated elastic membranes or metric knockouts

RK 1019 T NEW

1.5-4 mm²

IP 66



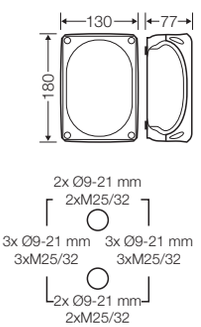
- 19 terminal blocks WK 4/U
- per terminal 2 x 0,5-4 mm² f, 2 x 0,5-6 mm² sol or 2 x 1,5-4 mm² s, see Technical details DK cable junction boxes for more information about terminal assignment
- terminal blocks, by Wieland
- for aluminium and copper conductors
- terminal marking, neutral
- with elastic membranes, which can be removed for cable entry via cable glands, sealing range 9.0-21.0 mm
- with two cable entries in the bottom, sealing range Ø 9.0-20.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	41 A
tightening torque for terminal	0.5 Nm
material	PP (polypropylene)

RK 1024 T NEW

1.5-4 mm²

IP 66



- 24 terminal blocks WK 4/U
- per terminal 2 x 0,5-4 mm² f, 2 x 0,5-6 mm² sol or 2 x 1,5-4 mm² s, see Technical details DK cable junction boxes for more information about terminal assignment
- terminal blocks, by Wieland
- for aluminium and copper conductors
- terminal marking, neutral
- with elastic membranes, which can be removed for cable entry via cable glands, sealing range 9.0-21.0 mm
- with two cable entries in the bottom, sealing range Ø 9.0-20.0 mm
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	41 A
tightening torque for terminal	0.5 Nm
material	PP (polypropylene)

Reference table	
Present types	**New types**
KF 9025	**KF 0202 G** **KF 0402 G**
KF 9045	**KF 0404 G** **KF 0604 G**
KF 9065	**KF 0606 G** **KF 1006 G**
KF 9105	**KF 1010 G** **KF 1610 G**
---	**KF 1616 G**
KF 9255	**KF 2525 G**
KF 9355	**KF 3535 G**
KF 9505	**KF 5050 G**
KF 9020	**KF 0200 G**
KF 9040	**KF 0400 G**
KF 9060	**KF 0600 G**
KF 9100	**KF 1000 G**
---	**KF 1600 G**
KF 9250	**KF 2500 G**
KF 9350	**KF 3500 G**
KF 9500	**KF 5000 G**
K 9350	**DK 3500 G**
K 9500	**DK 5000 G**

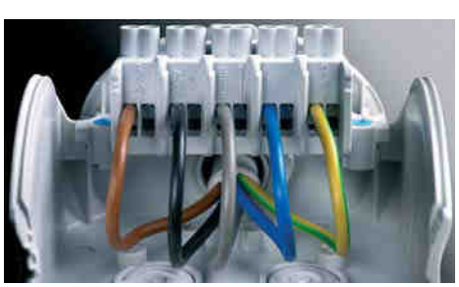
Reference table	
Present types	**New types**
KF 5025 KD 5025	**KF 0202 B** **KF 0402 B**
KF 5045 KD 5045	**KF 0404 B** **KF 0604 B**
KF 5065 KD 5065	**KF 0606 B** **KF 1006 B**
KF 5105 KD 5105	**KF 1010 B** **KF 1610 B**
---	**KF 1616 B**
KF 5255 KD 5255	**KF 2525 B**
KF 5355 KD 5355	**KF 3535 B**
KF 5505	**KF 5050 B**
KF 5020 KD 5020	**KF 0200 B**
KF 5040 KD 5040	**KF 0400 B**
KF 5060 KD 5060	**KF 0600 B**
KF 5100 KD 5100	**KF 1000 B**
---	**KF 1600 B**
KF 5250 KD 5250	**KF 2500 B**
KF 5350 KD 5350	**KF 3500 B**
KF 5500	**KF 5000 B**

Reference table	
Present types	**New types**
KF 5020 KD 5020	**KF 0200 B**
KF 5040 KD 5040	**KF 0400 B**
KF 5060 KD 5060	**KF 0600 B**
KF 5100 KD 5100	**KF 1000 B**
---	**KF 1600 B**
KF 5250 KD 5250	**KF 2500 B**
KF 5350 KD 5350	**KF 3500 B**
KF 5500	**KF 5000 B**
KF 8020	**KF 0200 H**
KF 8040	**KF 0400 H**
KF 8060	**KF 0600 H**
KF 8100	**KF 1000 H**
---	**KF 1600 H**
KF 8250	**KF 2500 H**
KF 8350	**KF 3500 H**
KF 8500	**KF 5000 H**

DK Cable junction boxes

“Weatherproof”, for outdoor installation

Cable entry via metric knockouts



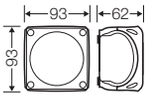
- VDE tested, DNV GL - Certificate No.: TAE00000EE,
  Russian Maritime Register of Shipping dokumentation-No.: 250-A-1180-108795
- Closes quickly by a quarter turn - locked position well visible (open - locked)
- Degree of protection IP 66 / IP 67 / IP 69 with cable glands as accessories,
  temporary submersion up to 1 meter, max. 15 minutes
- cable entry through the bottom of the box via integrated elastic membrane
- High-position terminals with more space for wiring
- external brackets for wall fixing included
- Comply with the regulatory restrictions for buildings with requirements regarding
  the structural fire protection DIN VDE 0100 Part 482 (German Standard)
- Halogen-free: low toxicity, low fume development
- Weatherproof: UV-resistant, rainwater-proof, temperature-resistant
- Material: PC-GFS polycarbonate
- Burning behaviour: Glow wire test in accordance with IEC 60695-2-11: 960 °C,
  flame-retardant, self-extinguishing
- Colour: grey RAL 7035 or black RAL9011

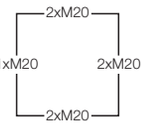
DK Cable junction boxes

„Weatherproof“, for outdoor installation
Cable entry via metric knockouts

KF 0202 G

1.5-2.5 mm², Cu 3~



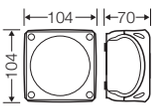


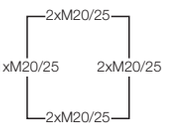
- terminal with 2 clamping units per pole
- 5-pole per pole 8 x 0,75 mm² f, 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 2 x 4 mm² sol / f
- cable entries via knockouts, order AKM separately
- (see cable entry systems LES)
- "weatherproof" resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	20 A
tightening torque for terminal	0.5 Nm
material	PC-GFS (polycarbonate)

KF 0402 G

1.5-2.5 mm², Cu 3~



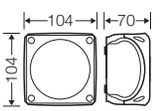


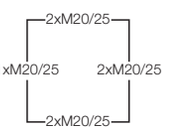
- terminal with 2 clamping units per pole
- 5-pole per pole 8 x 0,75 mm² f, 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 2 x 4 mm² sol / f
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- "weatherproof" resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	20 A
tightening torque for terminal	0.5 Nm
material	PC-GFS (polycarbonate)

KF 0404 G

1.5-4 mm², Cu 3~





- terminal with 2 clamping units per pole
- 5-pole per pole 8 x 1,5 mm² sol / f, 6 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 2 x 6 mm² sol / f
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- "weatherproof" resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	32 A
tightening torque for terminal	0.7 Nm
material	PC-GFS (polycarbonate)

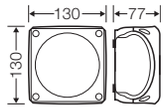
DK Cable junction boxes

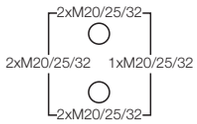
„Weatherproof“, for outdoor installation
Cable entry via metric knockouts

KF 0604 G

1.5-4 mm², Cu 3~

IP 66/67 IP 69





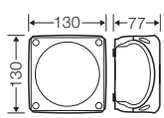
- terminal with 2 clamping units per pole
- 5-pole per pole 8 x 1,5 mm² sol / f, 6 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 2 x 6 mm² sol / f
- with one cable entry M 25 from the rear side
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- "weatherproof" resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

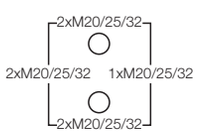
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	32 A
tightening torque for terminal	0.7 Nm
material	PC-GFS (polycarbonate)

KF 0606 G

2.5-6 mm², Cu 3~

IP 66/67 IP 69





- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 4 x 6 mm² sol / f, 2 x 10 mm² sol / f
- with one cable entry M 25 from the rear side
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- "weatherproof" resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	40 A
tightening torque for terminal	1.5 Nm
material	PC-GFS (polycarbonate)

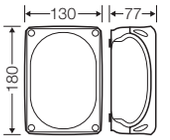
DK Cable junction boxes

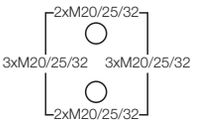
„Weatherproof“, for outdoor installation
Cable entry via metric knockouts

KF 1006 G

2.5-6 mm², Cu 3~

- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 4 x 6 mm² sol / f, 2 x 10 mm² sol / f
- with two cable entries M 25 from the rear side
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- "weatherproof" resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included



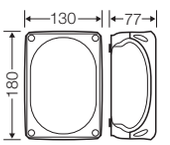


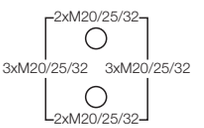
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	40 A
tightening torque for terminal	1.5 Nm
material	PC-GFS (polycarbonate)

KF 1010 G

4-10 mm², Cu 3~

- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 2.5 mm² sol, 4 x 4 mm² sol, 4 x 6 mm² sol, 4 x 10 mm² sol, 2 x 16 mm² s
- with two cable entries M 25 from the rear side
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- "weatherproof" resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included





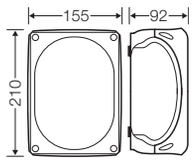
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	63 A
tightening torque for terminal	2.0 Nm
material	PC-GFS (polycarbonate)

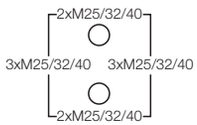
DK Cable junction boxes

„Weatherproof“, for outdoor installation
Cable entry via metric knockouts

KF 1610 G

4-10 mm², Cu 3~



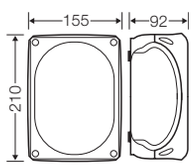


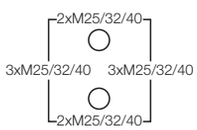
- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 2.5 mm² sol, 4 x 4 mm² sol, 4 x 6 mm² sol, 4 x 10 mm² sol, 2 x 16 mm² s
- with two cable entries M 32 from the rear side
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- "weatherproof" resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	63 A
tightening torque for terminal	2.0 Nm
material	PC-GFS (polycarbonate)

KF 1616 G

10-16 mm², Cu 3~





- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 6 mm² sol, 6 x 10 mm² sol/ f*, 4 x 16 mm² s/ f*, 4 x 25 mm² s/ f*, 2 x 35 mm² s/ f*
  f* = with gas-tight end ferrule
- with two cable entries M 32 from the rear side
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- "weatherproof" resistant to weather influences (UV due to solar adiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included

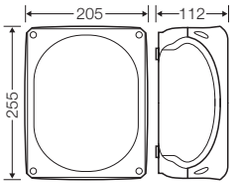
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	102 A
tightening torque for terminal	3.0 Nm
material	PC-GFS (polycarbonate)

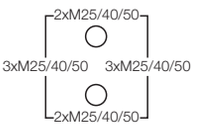
DK Cable junction boxes

„Weatherproof“, for outdoor installation
Cable entry via metric knockouts

KF 2525 G

10-25 mm², Cu 3~



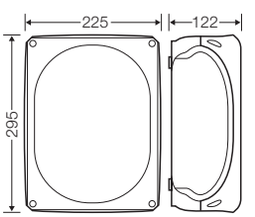


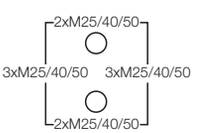
- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 6 mm² sol, 6 x 10 mm² sol/ f*, 4 x 16 mm² s/ f*, 4 x 25 mm² s/ f*, 2 x 35 mm² s/ f* f* = with gas-tight end ferrule
- with two cable entries M 32 from the rear side
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- "weatherproof" resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	102 A
tightening torque for terminal	3.0 Nm
material	PC-GFS (polycarbonate)

KF 3535 G

16-35 mm², Cu 3~





- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 16 mm² s, 4 x 25 mm² s, 4 x 35 mm² s, 2 x 50 mm² s
- with two cable entries M 32 from the rear side
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- "weatherproof" resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	125 A
tightening torque for terminal	12.0 Nm
material	PC-GFS (polycarbonate)

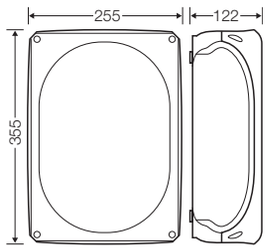
DK Cable junction boxes

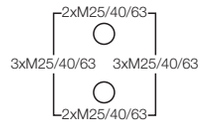
„Weatherproof“, for outdoor installation
Cable entry via metric knockouts

KF 5050 G

16-50 mm², Cu 3~

- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 16 mm² s, 4 x 25 mm² s, 4 x 35 mm² s, 4 x 50 mm² s
- with two cable entries M 32 from the rear side
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- "weatherproof" resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included





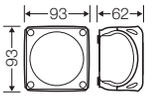
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	150 A
tightening torque for terminal	12.0 Nm
material	PC-GFS (polycarbonate)

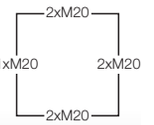
DK Cable junction boxes

„Weatherproof“, for outdoor installation
Cable entry via metric knockouts

KF 0200 G

- without terminals
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

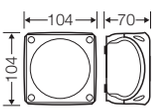


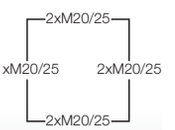


material	PC-GFS (polycarbonate)

KF 0400 G

- without terminals
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

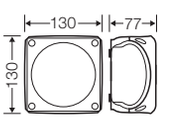


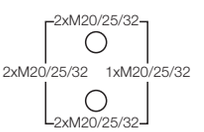


material	PC-GFS (polycarbonate)

KF 0600 G

- without terminals
- with one cable entry M 25 from the rear side
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included





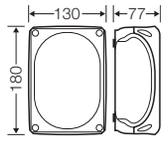
material	PC-GFS (polycarbonate)

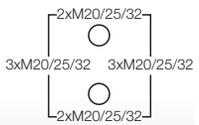
DK Cable junction boxes

„Weatherproof“, for outdoor installation
Cable entry via metric knockouts

KF 1000 G

IP 66/67 IP 69



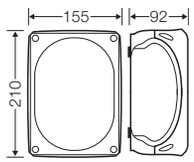


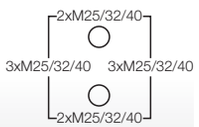
- without terminals
- with two cable entries M 25 from the rear side
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

material	PC-GFS (polycarbonate)

KF 1600 G

IP 66/67 IP 69



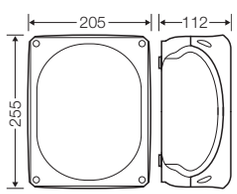


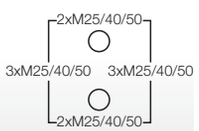
- without terminals
- with two cable entries M 32 from the rear side
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included

material	PC-GFS (polycarbonate)

KF 2500 G

IP 66/67 IP 69





- without terminals
- with two cable entries M 32 from the rear side
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included

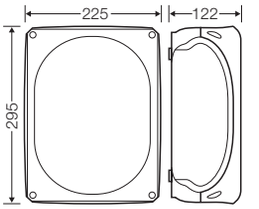
material	PC-GFS (polycarbonate)

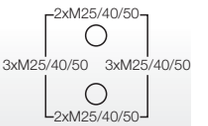
DK Cable junction boxes

„Weatherproof“, for outdoor installation
Cable entry via metric knockouts

KF 3500 G

- without terminals
- with two cable entries M 32 from the rear side
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included

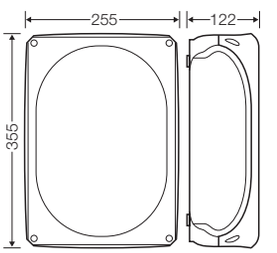


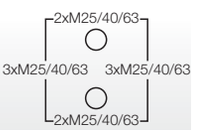


material	PC-GFS (polycarbonate)

KF 5000 G

- without terminals
- with two cable entries M 32 from the rear side
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included





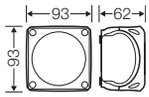
material	PC-GFS (polycarbonate)

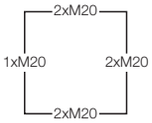
DK Cable junction boxes

„Weatherproof“, for outdoor installation
Cable entry via metric knockouts

KF 0202 B

1.5-2.5 mm², Cu 3~



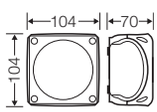


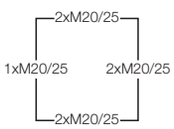
- terminal with 2 clamping units per pole
- 5-pole per pole 8 x 0,75 mm² f, 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 2 x 4 mm² sol / f
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	20 A
tightening torque for terminal	0.5 Nm
material	PC-GFS (polycarbonate)

KF 0402 B

1.5-2.5 mm², Cu 3~



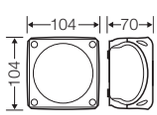


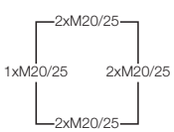
- terminal with 2 clamping units per pole
- 5-pole per pole 8 x 0,75 mm² f, 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 2 x 4 mm² sol / f
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	20 A
tightening torque for terminal	0.5 Nm
material	PC-GFS (polycarbonate)

KF 0404 B

1.5-4 mm², Cu 3~





- terminal with 2 clamping units per pole
- 5-pole per pole 8 x 1,5 mm² sol / f, 6 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 2 x 6 mm² sol / f
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	32 A
tightening torque for terminal	0.7 Nm
material	PC-GFS (polycarbonate)

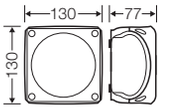
DK Cable junction boxes

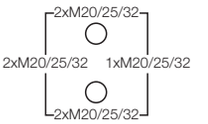
„Weatherproof“, for outdoor installation
Cable entry via metric knockouts

KF 0604 B

1.5-4 mm², Cu 3~

- terminal with 2 clamping units per pole
- 5-pole per pole 8 x 1,5 mm² sol / f, 6 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 2 x 6 mm² sol / f
- with one cable entry M 25 from the rear side
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included



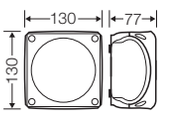


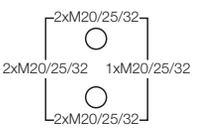
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	32 A
tightening torque for terminal	0.7 Nm
material	PC-GFS (polycarbonate)

KF 0606 B

2.5-6 mm², Cu 3~

- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 4 x 6 mm² sol / f, 2 x 10 mm² sol / f
- with one cable entry M 25 from the rear side
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included





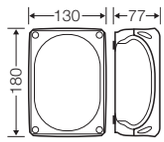
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	40 A
tightening torque for terminal	1.5 Nm
material	PC-GFS (polycarbonate)

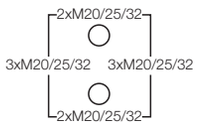
DK Cable junction boxes

„Weatherproof“, for outdoor installation
Cable entry via metric knockouts

KF 1006 B

2.5-6 mm², Cu 3~



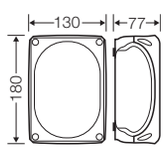


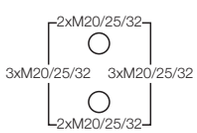
- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 4 x 6 mm² sol / f, 2 x 10 mm² sol / f
- with two cable entries M 25 from the rear side
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	40 A
tightening torque for terminal	1.5 Nm
material	PC-GFS (polycarbonate)

KF 1010 B

4-10 mm², Cu 3~





- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 2.5 mm² sol, 4 x 4 mm² sol, 4 x 6 mm² sol, 4 x 10 mm² sol, 2 x 16 mm² s
- with two cable entries M 25 from the rear side
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

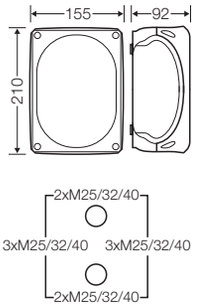
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	63 A
tightening torque for terminal	2.0 Nm
material	PC-GFS (polycarbonate)

DK Cable junction boxes

„Weatherproof“, for outdoor installation
Cable entry via metric knockouts

KF 1610 B

4-10 mm², Cu 3~

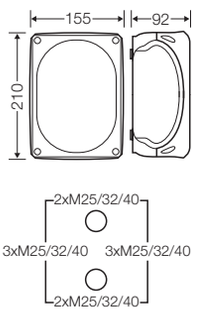


- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 2.5 mm² sol, 4 x 4 mm² sol, 4 x 6 mm² sol, 4 x 10 mm² sol, 2 x 16 mm² s
- with two cable entries M 32 from the rear side
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	63 A
tightening torque for terminal	2.0 Nm
material	PC-GFS (polycarbonate)

KF 1616 B

10-16 mm², Cu 3~



- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 6 mm² sol, 6 x 10 mm² sol/ f*, 4 x 16 mm² s/ f*, 4 x 25 mm² s/ f*, 2 x 35 mm² s/ f*
  f* = with gas-tight end ferrule
- with two cable entries M 32 from the rear side
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included

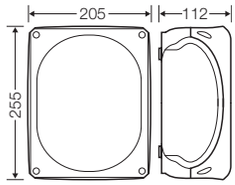
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	102 A
tightening torque for terminal	3.0 Nm
material	PC-GFS (polycarbonate)

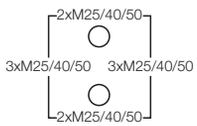
DK Cable junction boxes

„Weatherproof“, for outdoor installation
Cable entry via metric knockouts

KF 2525 B

10-25 mm², Cu 3~



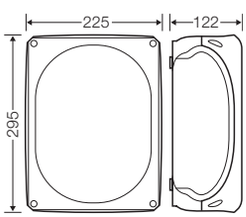


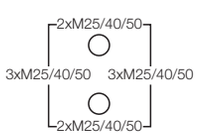
- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 6 mm² sol, 6 x 10 mm² sol/ f*, 4 x 16 mm² s/ f*, 4 x 25 mm² s/ f*, 2 x 35 mm² s/ f* f* = with gas-tight end ferrule
- with two cable entries M 32 from the rear side
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	102 A
tightening torque for terminal	3.0 Nm
material	PC-GFS (polycarbonate)

KF 3535 B

16-35 mm², Cu 3~





- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 16 mm² s, 4 x 25 mm² s, 4 x 35 mm² s, 2 x 50 mm² s
- with two cable entries M 32 from the rear side
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	125 A
tightening torque for terminal	12.0 Nm
material	PC-GFS (polycarbonate)

ENYCASE®

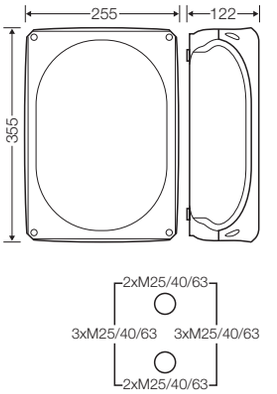
DK Cable junction boxes

„Weatherproof“, for outdoor installation
Cable entry via metric knockouts

KF 5050 B

16-50 mm², Cu 3~

- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 16 mm² s, 4 x 25 mm² s, 4 x 35 mm² s, 4 x 50 mm² s
- with two cable entries M 32 from the rear side
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included



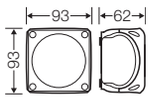
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	150 A
tightening torque for terminal	12.0 Nm
material	PC-GFS (polycarbonate)

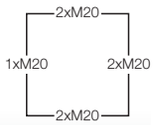
DK Cable junction boxes

„Weatherproof“, for outdoor installation
Cable entry via metric knockouts

KF 0200 B

IP 66/67 IP 69



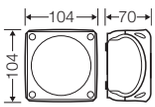


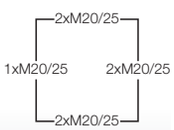
- without terminals
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

material	PC-GFS (polycarbonate)

KF 0400 B

IP 66/67 IP 69



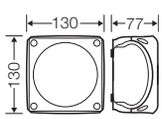


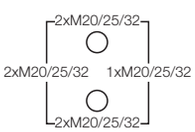
- without terminals
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

material	PC-GFS (polycarbonate)

KF 0600 B

IP 66/67 IP 69





- without terminals
- with one cable entry M 25 from the rear side
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

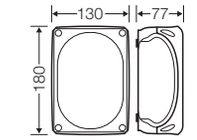
material	PC-GFS (polycarbonate)

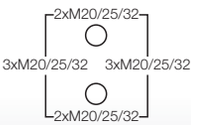
DK Cable junction boxes

„Weatherproof“, for outdoor installation
Cable entry via metric knockouts

KF 1000 B

- without terminals
- with two cable entries M 25 from the rear side
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

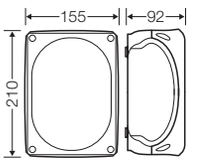


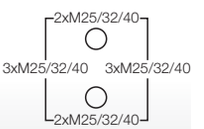


material	PC-GFS (polycarbonate)

KF 1600 B

- without terminals
- with two cable entries M 32 from the rear side
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included

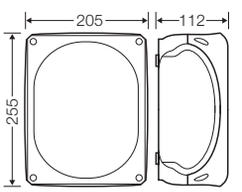


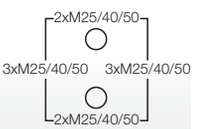


material	PC-GFS (polycarbonate)

KF 2500 B

- without terminals
- with two cable entries M 32 from the rear side
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included





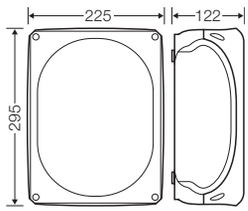
material	PC-GFS (polycarbonate)

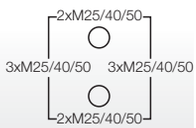
DK Cable junction boxes

„Weatherproof“, for outdoor installation
Cable entry via metric knockouts

KF 3500 B

- without terminals
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- with two cable entries M 32 from the rear side
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included

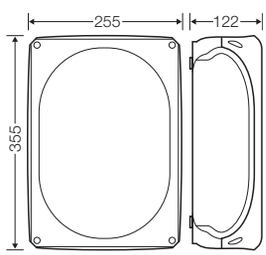


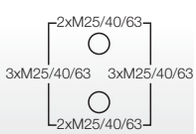


material	PC-GFS (polycarbonate)

KF 5000 B

- without terminals
- with two cable entries M 32 from the rear side
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included





material	PC-GFS (polycarbonate)

Reference table	
Present types	**New types**
KF 8020	**KF 0200 H**
KF 8040	**KF 0400 H**
KF 8060	**KF 0600 H**
KF 8100	**KF 1000 H**
---	**KF 1600 H**
KF 8250	**KF 2500 H**
KF 8350	**KF 3500 H**
KF 8500	**KF 5000 H**
KF 4020 KD 4020	**KF 0200 C**
KF 4040 KD 4040	**KF 0400 C**
KF 4060 KD 4060	**KF 0600 C**
KF 4100 KD 4100	**KF 1000 C**
---	**KF 1600 C**
KF 4250 KD 4250	**KF 2500 C**
KF 4350 KD 4350	**KF 3500 C**
KF 4500	**KF 5000 C**

DK Cable junction boxes

”Weatherproof“ for outdoor installation

Box walls without knockouts

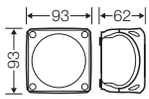
- VDE tested, DNV GL - Certificate No.: TAE00000EE, Russian Maritime Register of Shipping dokumentation-No.: 250-A-1180-108795
- Cable entries can be drilled individually
- Closes quickly by a quarter turn - locked position well visible (open - locked)
- Degree of protection IP 66 / IP 67 with cable glands as accessoies, temporary submersion up to 1 meter, max. 15 minutes
- cable entry through the bottom of the box via integrated elastic membrane
- High-position terminals with more space for wiring
- External brackets for wall fixing included
- Comply with the regulatory restrictions for buildings with requirements regarding the structural fire protection DIN VDE 0100 Part 482 (German Standard)
- Halogen-free: low toxicity, low fume development
- Weatherproof: UV-resistant, rainwater-proof, temperature-resistant
- Material: PC-GFS polycarbonate
- Burning behaviour: Glow wire test in accordance with IEC 60695-2-11: 960 °C, flame-retardant, self-extinguishing
- Colour: grey RAL 7035 or black RAL9011

DK Cable junction boxes

„Weatherproof“, for outdoor installation
Box walls without knockouts

KF 0200 H

IP 66/67 IP 69

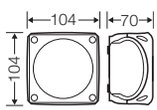


- without terminals
- Box walls without knockouts
- wall surface can be drilled individually for cable entry max. M20
- „weatherproof“ resistant to weather influences
  (UV due to solar radiation, protected against rainwater,
  temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

wall thickness of the bottom part	2.0 mm
material	PC-GFS (polycarbonate)

KF 0400 H

IP 66/67 IP 69

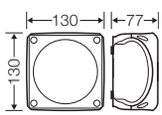


- without terminals
- Box walls without knockouts
- wall surface can be drilled individually for cable entry max. M25
- „weatherproof“ resistant to weather influences
  (UV due to solar radiation, protected against rainwater,
  temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

wall thickness of the bottom part	2.0 mm
material	PC-GFS (polycarbonate)

KF 0600 H

IP 66/67 IP 69



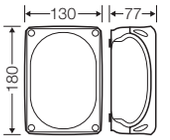
- without terminals
- Box walls without knockouts
- wall surface can be drilled individually for cable entry max. M32
- with one cable entry M 25 from the rear side
- „weatherproof“ resistant to weather influences
  (UV due to solar radiation, protected against rainwater,
  temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

wall thickness of the bottom part	2.0 mm
material	PC-GFS (polycarbonate)

DK Cable junction boxes

„Weatherproof“, for outdoor installation
Box walls without knockouts

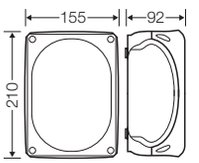
KF 1000 H



- without terminals
- Box walls without knockouts
- wall surface can be drilled individually for cable entry max. M32
- with two cable entries M 25 from the rear side
- „weatherproof“ resistant to weather influences
  (UV due to solar radiation, protected against rainwater,
  temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

wall thickness of the bottom part	2.0 mm
material	PC-GFS (polycarbonate)

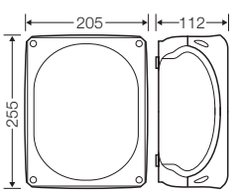
KF 1600 H



- without terminals
- Box walls without knockouts
- wall surface can be drilled individually for cable entry max. M40
- with two cable entries M 32 from the rear side
- „weatherproof“ resistant to weather influences
  (UV due to solar radiation, protected against rainwater,
  temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included

wall thickness of the bottom part	2.6 mm
material	PC-GFS (polycarbonate)

KF 2500 H



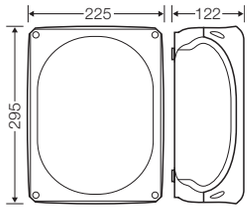
- without terminals
- Box walls without knockouts
- wall surface can be drilled individually for cable entry max. M50
- with two cable entries M 32 from the rear side
- „weatherproof“ resistant to weather influences
  (UV due to solar radiation, protected against rainwater,
  temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included

wall thickness of the bottom part	2.7 mm
material	PC-GFS (polycarbonate)

DK Cable junction boxes

„Weatherproof“, for outdoor installation
Box walls without knockouts

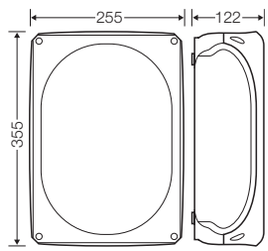
KF 3500 H



- without terminals
- Box walls without knockouts
- wall surface can be drilled individually for cable entry max. M50
- with two cable entries M 32 from the rear side
- „weatherproof“ resistant to weather influences
  (UV due to solar radiation, protected against rainwater,
  temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included

wall thickness of the bottom part	3.0 mm
material	PC-GFS (polycarbonate)

KF 5000 H



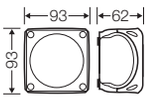
- without terminals
- Box walls without knockouts
- wall surface can be drilled individually for cable entry max. M63
- with two cable entries M 32 from the rear side
- „weatherproof“ resistant to weather influences
  (UV due to solar radiation, protected against rainwater,
  temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included

wall thickness of the bottom part	3.2 mm
material	PC-GFS (polycarbonate)

DK Cable junction boxes

„Weatherproof“, for outdoor installation
Box walls without knockouts

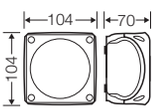
KF 0200 C



- without terminals
- Box walls without knockouts
- wall surface can be drilled individually for cable entry max. M20
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

wall thickness of the bottom part	2.0 mm
material	PC-GFS (polycarbonate)

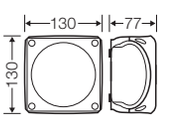
KF 0400 C



- without terminals
- Box walls without knockouts
- wall surface can be drilled individually for cable entry max. M25
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

wall thickness of the bottom part	2.0 mm
material	PC-GFS (polycarbonate)

KF 0600 C



- without terminals
- Box walls without knockouts
- wall surface can be drilled individually for cable entry max. M32
- with one cable entry M 25 from the rear side
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

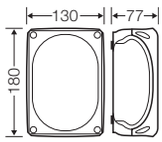
wall thickness of the bottom part	2.0 mm
material	PC-GFS (polycarbonate)

DK Cable junction boxes

„Weatherproof“, for outdoor installation
Box walls without knockouts

KF 1000 C

IP 66/67 IP 69

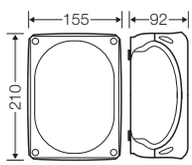


- without terminals
- Box walls without knockouts
- wall surface can be drilled individually for cable entry max. M32
- with two cable entries M 25 from the rear side
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- retaining strap and external brackets for wall fixing included

wall thickness of the bottom part	2.0 mm
material	PC-GFS (polycarbonate)

KF 1600 C

IP 66/67 IP 69

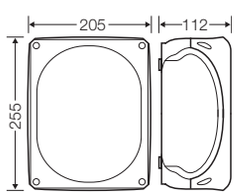


- without terminals
- Box walls without knockouts
- wall surface can be drilled individually for cable entry max. M40
- with two cable entries M 32 from the rear side
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included

wall thickness of the bottom part	2.6 mm
material	PC-GFS (polycarbonate)

KF 2500 C

IP 66/67 IP 69



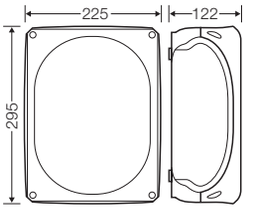
- without terminals
- Box walls without knockouts
- wall surface can be drilled individually for cable entry max. M50
- with two cable entries M 32 from the rear side
- „weatherproof“ resistant to weather influences (UV due to solar radiation, protected against rainwater, temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included

wall thickness of the bottom part	2.7 mm
material	PC-GFS (polycarbonate)

DK Cable junction boxes

„Weatherproof“, for outdoor installation
Box walls without knockouts

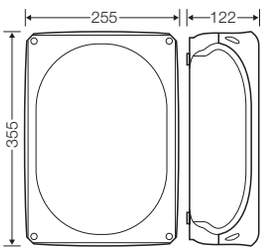
KF 3500 C



- without terminals
- Box walls without knockouts
- wall surface can be drilled individually for cable entry max. M50
- with two cable entries M 32 from the rear side
- „weatherproof“ resistant to weather influences
  (UV due to solar radiation, protected against rainwater,
  temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included

wall thickness of the bottom part	3.0 mm
material	PC-GFS (polycarbonate)

KF 5000 C



- without terminals
- Box walls without knockouts
- wall surface can be drilled individually for cable entry max. M63
- with two cable entries M 32 from the rear side
- „weatherproof“ resistant to weather influences
  (UV due to solar radiation, protected against rainwater,
  temperature resistant, impact resistant, etc.)
- saltwater-proof
- "offshore applications"
- lid fasteners sealable without accessories
- external brackets for wall fixing included

wall thickness of the bottom part	3.2 mm
material	PC-GFS (polycarbonate)

Reference table	
Present types	**New types**
KF WP 3025	**WP 0202 G** **WP 0402 G**
KF WP 3045	**WP 0404 G** **WP 0604 G**
KF WP 3065	**WP 0606 G** **WP 1006 G**
KF WP 3105	**WP 1010 G**
KF WP 2025	**WP 0202 B** **WP 0402 B**
KF WP 2045	**WP 0404 B** **WP 0604 B**
KF WP 2065	**WP 0606 B** **WP 1006 B**
KF WP 2105	**WP 1010 B**

DK Cable junction boxes

"Waterproof", for encapsulating

for outdoor installation and use in harsh environmental conditions with risk of condensation and ingress of water as well as for installation in the ground without traffic loads

- By sealing cable junction boxes with a sealing compound the ingress of water and formation of condensation is completely prevented.
- After removing the lid the measuring can be carried out.
- In case of re-installation or testing the sealing compound can be removed easily
- Material: PC-GFS polycarbonate
- Burning behaviour: Glow wire test in accordance with IEC 60695-2-11: 960 °C, flame-retardant, self-extinguishing
- Colour: grey RAL 7035 or black RAL9011

ENYCASE®

DK Cable junction boxes

"Waterproof", for encapsulating

Permanent waterproof connection -
Cable junction boxes for encapsulating in accordance with DIN VDE V 0606-22-100

Time and time again, electricians come across installation environments whereby the ingress of water into an enclosure must be safely excluded. Even enclosures which have a high
degree of protection cannot guarantee this. The IP degree of protection allows the ingress of non-harmful quantities of water in the interior of an enclosure.
Under extreme environmental conditions, for example, the accumulation of condensation may result in damage to the electrical installation or devices or cause these to malfunction.
Ventilation measures will often suffice to prevent harmful condensation from forming.
In many cases, however, ventilation is not possible, e.g. because the cable junction boxes are installed close to rivers and water could enter through the vent holes.

Which applications require waterproof connections?
- Pump shafts
- Ground-level installation ducts in outdoor areas
- Flood areas close to rivers
- Unprotected outdoor installations which are in close proximity to the ground

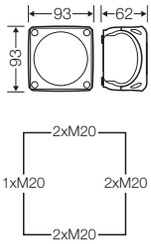
Why is the IP degree of protection alone not sufficient?
- All degrees of protection allow water ingress
- The accumulation of condensation cannot always be prevented
- Ventilation measures cannot be applied in all environments

The waterproof connection:
Sealing the cable junction boxes with a fast setting, permanently elastic sealing compound completely prevents the ingress of water and excludes forming of condensation.
The sealing compound features outstanding insulation properties. As the compound is transparent, it is possible for visual inspections of the installation to be carried out at any time. The durable elastic material is self-sealing, therefore it is also easy for the electrical connections to be tested after they have been sealed.
The sealing compound can be easily removed for repairs, subsequent installations or changes to installations.
Another benefit: the sealed cable junction boxes also offer reliable protection against shock and vibration. The sealing compound does not, however, provide strain relief as it only adheres to material and does not stick together. Suitable cable entries must also be used here, e.g. Hensel AKM.

The ingress of water and formation of condensation are completely prevented.
The sealing compound can be easily removed for subsequent installations or inspections.

WP 0202 G

1.5-2.5 mm², Cu 3~

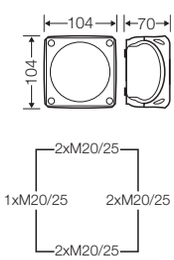


- with terminals
- 5-pole per pole 8 x 0,75 mm² f, 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 2 x 4 mm² sol / f
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- cable junction box for encapsulating
- for ground installation without live loads or in risk of condensation formation and ingress of liquids
- installation under water without chemical additives up to a depth of 1 meter possible in the long term
- usable for heating cable / heating tape up to max. 70 °C surface temperature
- with sealing compound and sealing plug
- in case of re-installation or testing the sealing compound can be removed easily
- durability of sealing compound to processing ≥ 12 months at a storage temperature of 5 - 35 °C
- external brackets for wall fixing included
- enclosure volume 350 ml

degree of protection	For totally encapsulated cable junction boxes the IP degrees of protection of enclosures according to DIN EN 60529 are not applicable.
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	20 A
tightening torque for terminal	0.5 Nm
material	PC-GFS (polycarbonate)

WP 0402 G

1.5-2.5 mm², Cu 3~



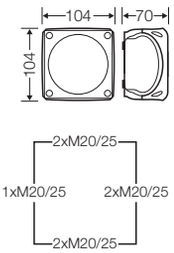
- with terminals
- 5-pole per pole 8 x 0,75 mm² f, 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 2 x 4 mm² sol / f
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- cable junction box for encapsulating
- for ground installation without live loads or in risk of condensation formation and ingress of liquids
- installation under water without chemical additives up to a depth of 1 meter possible in the long term
- usable for heating cable / heating tape up to max. 70 °C surface temperature
- with sealing compound and sealing plug
- in case of re-installation or testing the sealing compound can be removed easily
- durability of sealing compound to processing ≥ 12 months at a storage temperature of 5 - 35 °C
- external brackets for wall fixing included
- enclosure volume 500 ml

degree of protection	For totally encapsulated cable junction boxes the IP degrees of protection of enclosures according to DIN EN 60529 are not applicable.
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	20 A
tightening torque for terminal	0.5 Nm
material	PC-GFS (polycarbonate)

DK Cable junction boxes
"Waterproof", for encapsulating

WP 0404 G

1.5-4 mm², Cu 3~

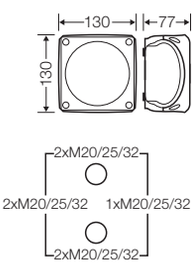


- with terminals
- 5-pole per pole 8 x 1,5 mm² sol / f, 6 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 2 x 6 mm² sol / f
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- cable junction box for encapsulating
- for ground installation without live loads or in risk of condensation formation and ingress of liquids
- installation under water without chemical additives up to a depth of 1 meter possible in the long term
- usable for heating cable / heating tape up to max. 70 °C surface temperature
- with sealing compound and sealing plug
- in case of re-installation or testing the sealing compound can be removed easily
- durability of sealing compound to processing ≥ 12 months at a storage temperature of 5 - 35 °C
- external brackets for wall fixing included
- enclosure volume 500 ml

degree of protection	For totally encapsulated cable junction boxes the IP degrees of protection of enclosures according to DIN EN 60529 are not applicable.
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	32 A
tightening torque for terminal	0.7 Nm
material	PC-GFS (polycarbonate)

WP 0604 G

1.5-4 mm², Cu 3~

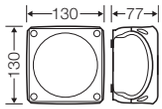


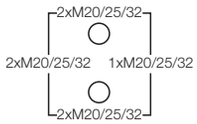
- with terminals
- 5-pole per pole 8 x 1,5 mm² sol / f, 6 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 2 x 6 mm² sol / f
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- cable junction box for encapsulating
- for ground installation without live loads or in risk of condensation formation and ingress of liquids
- installation under water without chemical additives up to a depth of 1 meter possible in the long term
- usable for heating cable / heating tape up to max. 70 °C surface temperature
- with sealing compound and sealing plug
- in case of re-installation or testing the sealing compound can be removed easily
- durability of sealing compound to processing ≥ 12 months at a storage temperature of 5 - 35 °C
- external brackets for wall fixing included
- enclosure volume 850 ml

degree of protection	For totally encapsulated cable junction boxes the IP degrees of protection of enclosures according to DIN EN 60529 are not applicable.
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	32 A
tightening torque for terminal	0.7 Nm
material	PC-GFS (polycarbonate)

WP 0606 G

2.5-6 mm², Cu 3~



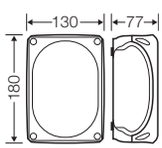


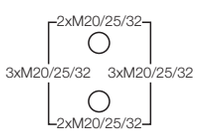
- with terminals
- 5-pole per pole 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 4 x 6 mm² sol / f, 2 x 10 mm² sol / f
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- cable junction box for encapsulating
- for ground installation without live loads or in risk of condensation formation and ingress of liquids
- installation under water without chemical additives up to a depth of 1 meter possible in the long term
- usable for heating cable / heating tape up to max. 70 °C surface temperature
- with sealing compound and sealing plug
- in case of re-installation or testing the sealing compound can be removed easily
- durability of sealing compound to processing ≥ 12 months at a storage temperature of 5 - 35 °C
- external brackets for wall fixing included
- enclosure volume 850 ml

degree of protection	For totally encapsulated cable junction boxes the IP degrees of protection of enclosures according to DIN EN 60529 are not applicable.
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	40 A
tightening torque for terminal	1.5 Nm
material	PC-GFS (polycarbonate)

WP 1006 G

2.5-6 mm², Cu 3~





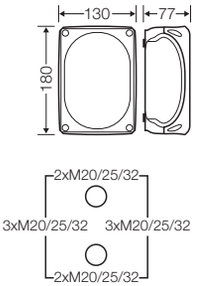
- with terminals
- 5-pole per pole 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 4 x 6 mm² sol / f, 2 x 10 mm² sol / f
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- cable junction box for encapsulating
- for ground installation without live loads or in risk of condensation formation and ingress of liquids
- installation under water without chemical additives up to a depth of 1 meter possible in the long term
- usable for heating cable / heating tape up to max. 70 °C surface temperature
- with sealing compound and sealing plug
- in case of re-installation or testing the sealing compound can be removed easily
- durability of sealing compound to processing ≥ 12 months at a storage temperature of 5 - 35 °C
- external brackets for wall fixing included
- enclosure volume 1200 ml

degree of protection	For totally encapsulated cable junction boxes the IP degrees of protection of enclosures according to DIN EN 60529 are not applicable.
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	40 A
tightening torque for terminal	1.5 Nm
material	PC-GFS (polycarbonate)

DK Cable junction boxes
"Waterproof", for encapsulating

WP 1010 G

4-10 mm², Cu 3~

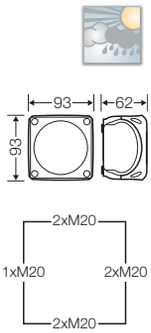


- with terminals
- 5-pole per pole 6 x 2.5 mm² sol, 4 x 4 mm² sol, 4 x 6 mm² sol, 4 x 10 mm² sol, 2 x 16 mm² s
- cable entries via knockouts, order AKM separately (see cable entry systems LES)
- cable junction box for encapsulating
- for ground installation without live loads or in risk of condensation formation and ingress of liquids
- installation under water without chemical additives up to a depth of 1 meter possible in the long term
- usable for heating cable / heating tape up to max. 70 °C surface temperature
- with sealing compound and sealing plug
- in case of re-installation or testing the sealing compound can be removed easily
- durability of sealing compound to processing ≥ 12 months at a storage temperature of 5 - 35 °C
- external brackets for wall fixing included
- enclosure volume 1200 ml

degree of protection	For totally encapsulated cable junction boxes the IP degrees of protection of enclosures according to DIN EN 60529 are not applicable.
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	63 A
tightening torque for terminal	2.0 Nm
material	PC-GFS (polycarbonate)

WP 0202 B

1.5-2.5 mm², Cu 3~

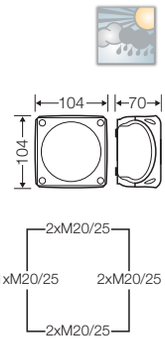


- with terminals
- 5-pole per pole 8 x 0,75 mm² f, 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 2 x 4 mm² sol / f
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- cable junction box for encapsulating
- for ground installation without live loads or in risk of condensation formation and ingress of liquids
- installation under water without chemical additives up to a depth of 1 meter possible in the long term
- usable for heating cable / heating tape up to max. 70 °C surface temperature
- with sealing compound and sealing plug
- in case of re-installation or testing the sealing compound can be removed easily
- durability of sealing compound to processing ≥ 12 months at a storage temperature of 5 - 35 °C
- external brackets for wall fixing included
- enclosure volume 350 ml

degree of protection	For totally encapsulated cable junction boxes the IP degrees of protection of enclosures according to DIN EN 60529 are not applicable.
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	20 A
tightening torque for terminal	0.5 Nm
material	PC-GFS (polycarbonate)

WP 0402 B

1.5-2.5 mm², Cu 3~



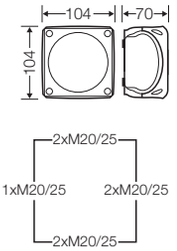
- with terminals
- 5-pole per pole 8 x 0,75 mm² f, 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 2 x 4 mm² sol / f
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- cable junction box for encapsulating
- for ground installation without live loads or in risk of condensation formation and ingress of liquids
- installation under water without chemical additives up to a depth of 1 meter possible in the long term
- usable for heating cable / heating tape up to max. 70 °C surface temperature
- with sealing compound and sealing plug
- in case of re-installation or testing the sealing compound can be removed easily
- durability of sealing compound to processing ≥ 12 months at a storage temperature of 5 - 35 °C
- external brackets for wall fixing included
- enclosure volume 500 ml

degree of protection	For totally encapsulated cable junction boxes the IP degrees of protection of enclosures according to DIN EN 60529 are not applicable.
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	20 A
tightening torque for terminal	0.5 Nm
material	PC-GFS (polycarbonate)

DK Cable junction boxes
"Waterproof", for encapsulating

WP 0404 B

1.5-4 mm², Cu 3~

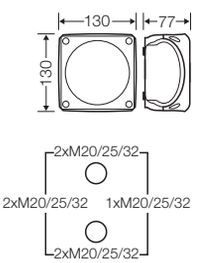


- with terminals
- 5-pole per pole 8 x 1,5 mm² sol / f, 6 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 2 x 6 mm² sol / f
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- cable junction box for encapsulating
- for ground installation without live loads or in risk of condensation formation and ingress of liquids
- installation under water without chemical additives up to a depth of 1 meter possible in the long term
- usable for heating cable / heating tape up to max. 70 °C surface temperature
- with sealing compound and sealing plug
- in case of re-installation or testing the sealing compound can be removed easily
- durability of sealing compound to processing ≥ 12 months at a storage temperature of 5 - 35 °C
- external brackets for wall fixing included
- enclosure volume 500 ml

degree of protection	For totally encapsulated cable junction boxes the IP degrees of protection of enclosures according to DIN EN 60529 are not applicable.
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	32 A
tightening torque for terminal	0.7 Nm
material	PC-GFS (polycarbonate)

WP 0604 B

1.5-4 mm², Cu 3~

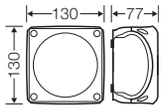


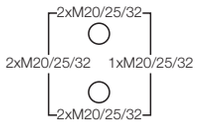
- with terminals
- 5-pole per pole 8 x 1,5 mm² sol / f, 6 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 2 x 6 mm² sol / f
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- cable junction box for encapsulating
- for ground installation without live loads or in risk of condensation formation and ingress of liquids
- installation under water without chemical additives up to a depth of 1 meter possible in the long term
- usable for heating cable / heating tape up to max. 70 °C surface temperature
- with sealing compound and sealing plug
- in case of re-installation or testing the sealing compound can be removed easily
- durability of sealing compound to processing ≥ 12 months at a storage temperature of 5 - 35 °C
- external brackets for wall fixing included
- enclosure volume 850 ml

degree of protection	For totally encapsulated cable junction boxes the IP degrees of protection of enclosures according to DIN EN 60529 are not applicable.
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	32 A
tightening torque for terminal	0.7 Nm
material	PC-GFS (polycarbonate)

WP 0606 B

1.5-6 mm², Cu 3~



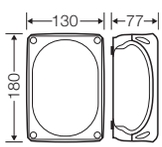


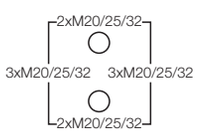
- with terminals
- 5-pole per pole 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 4 x 6 mm² sol / f, 2 x 10 mm² sol / f
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- cable junction box for encapsulating
- for ground installation without live loads or in risk of condensation formation and ingress of liquids
- installation under water without chemical additives up to a depth of 1 meter possible in the long term
- usable for heating cable / heating tape up to max. 70 °C surface temperature
- with sealing compound and sealing plug
- in case of re-installation or testing the sealing compound can be removed easily
- durability of sealing compound to processing ≥ 12 months at a storage temperature of 5 - 35 °C
- external brackets for wall fixing included
- enclosure volume 850 ml

degree of protection	For totally encapsulated cable junction boxes the IP degrees of protection of enclosures according to DIN EN 60529 are not applicable.
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	40 A
tightening torque for terminal	1.5 Nm
material	PC-GFS (polycarbonate)

WP 1006 B

2.5-6 mm², Cu 3~





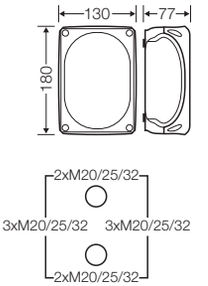
- with terminals
- 5-pole per pole 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 4 x 6 mm² sol / f, 2 x 10 mm² sol / f
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- cable junction box for encapsulating
- for ground installation without live loads or in risk of condensation formation and ingress of liquids
- installation under water without chemical additives up to a depth of 1 meter possible in the long term
- usable for heating cable / heating tape up to max. 70 °C surface temperature
- with sealing compound and sealing plug
- in case of re-installation or testing the sealing compound can be removed easily
- durability of sealing compound to processing ≥ 12 months at a storage temperature of 5 - 35 °C
- external brackets for wall fixing included
- enclosure volume 1200 ml

degree of protection	For totally encapsulated cable junction boxes the IP degrees of protection of enclosures according to DIN EN 60529 are not applicable.
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	40 A
tightening torque for terminal	1.5 Nm
material	PC-GFS (polycarbonate)

DK Cable junction boxes
"Waterproof", for encapsulating

WP 1010 B

4-10 mm², Cu 3~



- with terminals
- 5-pole per pole 6 x 2.5 mm² sol, 4 x 4 mm² sol, 4 x 6 mm² sol, 4 x 10 mm² sol, 2 x 16 mm² s
- cable entries via knockouts, order ASS separately (see cable entry systems LES)
- cable junction box for encapsulating
- for ground installation without live loads or in risk of condensation formation and ingress of liquids
- installation under water without chemical additives up to a depth of 1 meter possible in the long term
- usable for heating cable / heating tape up to max. 70 °C surface temperature
- with sealing compound and sealing plug
- in case of re-installation or testing the sealing compound can be removed easily
- durability of sealing compound to processing ≥ 12 months at a storage temperature of 5 - 35 °C
- external brackets for wall fixing included
- enclosure volume 1200 ml

degree of protection	For totally encapsulated cable junction boxes the IP degrees of protection of enclosures according to DIN EN 60529 are not applicable.
rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	63 A
tightening torque for terminal	2.0 Nm
material	PC-GFS (polycarbonate)

DK Cable junction boxes
"Waterproof", for encapsulating

GH 0350

Set sealing compound, 350 ml

- as spares
- sealing compound for refilling after changes or repairs
- durability of sealing compound to processing ≥ 12 months at a storage temperature of 5 - 35 °C

GH 0500

Set sealing compound, 500 ml

- as spares
- sealing compound for refilling after changes or repairs
- durability of sealing compound to processing ≥ 12 months at a storage temperature of 5 - 35 °C

GH 0850

Set sealing compound, 850 ml

- as spares
- sealing compound for refilling after changes or repairs
- durability of sealing compound to processing ≥ 12 months at a storage temperature of 5 - 35 °C

GH 1200

Set sealing compound, 1200 ml

- as spares
- sealing compound for refilling after changes or repairs
- durability of sealing compound to processing ≥ 12 months at a storage temperature of 5 - 35 °C

Safety in the event of a fire

Cable junction boxes from Hensel are tested for insulation integrity PH120 and intrinsic fire resistance in electrical cable systems E30/E60/E90

Especially in buildings with public traffic as department stores, airports, hospitals, etc. and other public places security is top priority. The emergency power supply in accordance with regional building regulations is generally required. In the event of fire, the functional integrity of the emergency power supply must be guaranteed for a specific period of time. This ensures that electric devices, such as emergency lighting, lifts, smoke extractors, alarms, etc. remain operational for 30, 60 or 90 minutes and that people can leave the building and rescue services can work in case of fire. In addition to these requirements electrical installation systems must fulfill especially the electrical parameters with all components.

Generally two, but different standards and testing procedures have been established.

BS BS EN 50200 Flame exposure period	Classifi-cation
15 minutes	PH15
30 minutes	PH30
60 minutes	PH60
90 minutes	PH90
120 minutes	PH120

Insulation integrity PH120

Testing for resistance to fire of unprotected cable lines (cables with cable junction boxes) for use in emergency circuits. This test method consider1^^^^s single tested products regardless of their usage.

This test determines the period for which a mechanically unloaded cable maintains a minimum insulation integrity under fire exposure.
The test is passed, if after a test period of 120 minutes the current still flows and no short circuit or cable break can be detected. The tested product achieves PH120 Classification.

Testing for insulation integrity is a hardness test, which only high quality materials can pass.
Complete cable installations are not subject of this test.

Hensel products comply with the PH120 Classification of standard BS EN 50200. Local requirements must be considered additionally. E.g. British Standard BS 5839-1:2013 places additional demands to enhance the fire-resisting level.

Testing for insulation integrity PH120:
BS EN 50200 (> 842 °C)

Cable junction boxes with connected cables after testing

DIN 4102-12 Intrinsic fire resistance for	Classification
30 minutes	E30
60 minutes	E60
90 minutes	E90

Intrinsic fire resistance E30/E60/E90 places higher demands

In contrast to insulation integrity, the testing of intrinsic fire resistance accesses not just a single test product, but the cable system as a whole including all components.

The German standard DIN 4102-12 sets the requirements on a complete cable system to achieve the functional integrity in the event of fire.
The classifications E30, E60, E90 indicate the period for which a complete cable system ensures functional integrity so that emergency power supply remains operational in case of fire, for example E90 is 90 minutes.
The test approves a cable system as a whole under real-life conditions including all components as support systems, cable junction boxes and mounting device.
Testing of functional integrity sets extreme but realistic demands on a complete cable system in combination with all installed components.
Therefore this method of test allows meaningful conclusions to be drawn on the realistic behaviour in the event of fire (full intrinisic fire resistance).

Testing on functional integrity E30/E60/E90 of cable systems in the event of fire:
DIN 4102-12 (E30-E90) German Standard

Reliable power supply - even in the event of fire!

Planning process for intrinsic fire resistance and insulation integrity

1. Requirements

Country-specific requirements and national laws have to be observed!

The relevant local regulations of legislators, fire brigades or similar services, which are placed on the building and its use must be observed.

2. E30 / E60 / E90 PH120?

Are there any requirements for

- intrinsic fire resistance in electrical installations E30/E60/E90 or
- insulation integrity PH120 according to BS EN 50200?

3. Selection of material

Selection should be carried out according to

- intrinsic fire resistance E30 or E90 or insulation integrity e.g. PH120
- cable junction or cable connection
- installation procedure in buildings
- type of cable installation
- anchoring method on the building material
- approval of materials according to certificate

4. Manufacturer

Country-specific requirements and national laws have to be observed!

The selection of a cable manufacturer is carried out according to

- type of cable installation
- required cable junction or cable connection

5. Operating

Country-specific requirements and national laws have to be observed!

Professional execution of the installation work.

DK Cable junction boxes

Approved for intrinsic fire resistance and insulation integrity

with included grommets

- Intrinsic fire resistance in accordance with DIN 4102 Part 12 (German standard) in combination with function-retaining cables
- Insulation integrity PH120 in accordance with BS EN 50200 in combination with insulation retaining cables
- Screw anchors, high-temperature-resistant ceramic terminal E30 up to E90 and cable entries included as standard
- Multi-level knockouts for cable glands in different sizes
- Closes quickly by a quarter turn - locked position well visible (open - locked)
- Material: PC-GFS polycarbonate
- Colour: orange, RAL 2003
- Glow wire test in accordance with IEC 60695-2-11: 960 °C, flame-retardant, self-extinguishing
- Resistance to impact: IK 09 (10 Joule)
- Degree of protection: IP 65/66

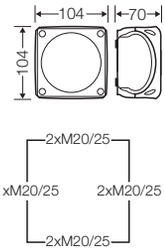
DK Cable junction boxes

Approved for intrinsic fire resistance and insulation integrity
With included grommets

FK 0402

PH120 | E30 E60 E90 | IP 65/66

Cable junction box 1.5 mm², Cu
Connection box 1.5-2.5 mm², Cu



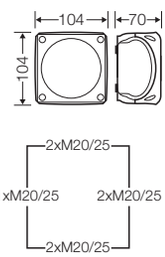
- 5-pole per pole 4 x 1.5 mm² sol and 2 x 2.5 mm² sol
- connecting terminal made from ceramic with resistance to high temperatures
- included cable entry: 3 EDKF 25, sealing range: Ø 9-17 mm, IP 65
- IP 66 using AKMF cable glands, please order separately
- intrinsic fire resistance in accordance with DIN 4102 Part 12 (German standard) in combination with function-retaining cables
- tested with the cable manufacturer Dätwyler and Eupen for the intrinsic fire resistance E30 up to E90, see test certificate no.: P-MPA-E-15-018 valid till August 05, 2021, download available from www.hensel-electric.de > type - documents
- Tested for insulation integrity in accordance with BS EN 50200 in connection with insulation retaining cables, see test certificate, download available from www.hensel-electric.de > type - documents
- screw anchors enclosed can be used for concrete C20/25, limestone blocks KSV 12, building bricks MZ 12 and clinker bricks KS 12
- for normal environment and protected outdoor

rated insulation voltage	U_i = 400 V a.c./d.c.
current carrying capacity	24 A
tightening torque for terminal	0.5 Nm
material	PC-GFS (polycarbonate)

FK 0404

PH120 | E30 E60 E90 | IP 65/66

Cable junction box 1.5-2.5 mm², Cu
Connection box 1.5-4 mm², Cu



- 5-pole per pole 8 x 1.5 mm² sol, 4 x 2.5 mm² sol, 2 x 4 mm² sol
- connecting terminal made from ceramic with resistance to high temperatures
- included cable entry: 3 EDKF 25, sealing range: Ø 9-17 mm, IP 65
- IP 66 using AKMF cable glands, please order separately
- intrinsic fire resistance in accordance with DIN 4102 Part 12 (German standard) in combination with function-retaining cables
- tested with the cable manufacturer Dätwyler and Eupen for the intrinsic fire resistance E30 up to E90, see test certificate no.: P-MPA-E-15-018 valid till August 05, 2021, download available from www.hensel-electric.de > type - documents
- Tested for insulation integrity in accordance with BS EN 50200 in connection with insulation retaining cables, see test certificate, download available from www.hensel-electric.de > type - documents
- screw anchors enclosed can be used for concrete C20/25, limestone blocks KSV 12, building bricks MZ 12 and clinker bricks KS 12
- for normal environment and protected outdoor

rated insulation voltage	U_i = 400 V a.c./d.c.
current carrying capacity	32 A
tightening torque for terminal	1,2 Nm
material	PC-GFS (polycarbonate)

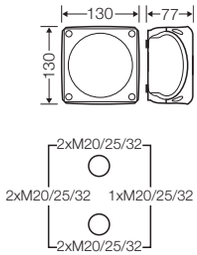
DK Cable junction boxes

Approved for intrinsic fire resistance and insulation integrity
With included grommets

FK 0604

PH120 | E30 E60 E90 | IP 65/66

Cable junction box 1.5-2.5 mm², Cu
Connection box 1.5-6 mm2, Cu



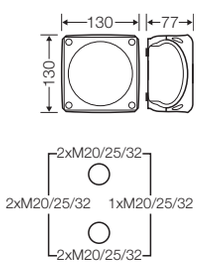
- 5-pole per pole 8 x 1.5 mm² sol, 4 x 2.5 mm² sol, 2 x 4 mm² sol, 2 x 6 mm² sol
- connecting terminal made from ceramic with resistance to high temperatures
- included cable entry: 3 EDKF 32, sealing range: 8-23 mm, IP 65
- IP 66 using AKMF cable glands, please order separately
- intrinsic fire resistance in accordance with DIN 4102 Part 12 (German standard) in combination with function-retaining cables
- tested with the cable manufacturer Dätwyler and Eupen for the intrinsic fire resistance E30 up to E90, see test certificate no.: P-MPA-E-15-018 valid till August 05, 2021, download available from www.hensel-electric.de > type - documents
- Tested for insulation integrity in accordance with BS EN 50200 in connection with insulation retaining cables, see test certificate, download available from www.hensel-electric.de > type - documents
- screw anchors enclosed can be used for concrete C20/25, limestone blocks KSV 12, building bricks MZ 12 and clinker bricks KS 12
- for normal environment and protected outdoor

rated insulation voltage	U_i = 400 V a.c./d.c.
current carrying capacity	41 A
tightening torque for terminal	1,2 Nm
material	PC-GFS (polycarbonate)

FK 0606

PH120 | E30 E60 E90 | IP 65/66

Cable junction box 1.5-6 mm², Cu
Connection box 1.5-6 mm2, Cu



- 5-pole per pole 12 x 1.5 mm² sol, 8 x 2.5 mm² sol, 6 x 4 mm² sol, 4 x 6 mm² sol
- connecting terminal made from ceramic with resistance to high temperatures
- included cable entry: 3 EDKF 32, sealing range: 8-23 mm, IP 65
- IP 66 using AKMF cable glands, please order separately
- intrinsic fire resistance in accordance with DIN 4102 Part 12 (German standard) in combination with function-retaining cables
- tested with the cable manufacturer Dätwyler and Eupen for the intrinsic fire resistance E30 up to E90, see test certificate no.: P-MPA-E-15-018 valid till August 05, 2021, download available from www.hensel-electric.de > type - documents
- Tested for insulation integrity in accordance with BS EN 50200 in connection with insulation retaining cables, see test certificate, download available from www.hensel-electric.de > type - documents
- screw anchors enclosed can be used for concrete C20/25, limestone blocks KSV 12, building bricks MZ 12 and clinker bricks KS 12
- for normal environment and protected outdoor

rated insulation voltage	U_i = 400 V a.c./d.c.
current carrying capacity	41 A
tightening torque for terminal	2.0 Nm
material	PC-GFS (polycarbonate)

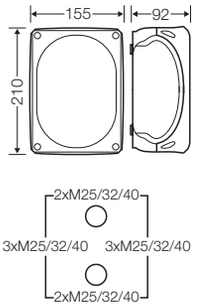
DK Cable junction boxes

Approved for intrinsic fire resistance and insulation integrity
With included grommets

FK 1606

PH120 | E30 E60 E90 | IP 65/66

Cable junction box 1.5-6 mm², Cu
Connection box 1.5-6 mm2, Cu



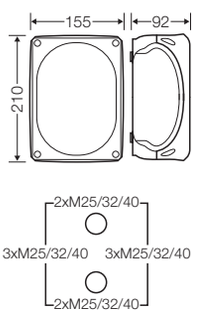
- 5 terminals per pole 12 x 1,5 mm² sol, 8 x 2,5 mm² sol, 6 x 4 mm² sol, 4 x 6 mm² sol
- terminal for 4 x 1,5 mm² sol or 2 x 2,5 mm² sol and PE terminal
- connecting terminal made from ceramic with resistance to high temperatures
- included cable entry: 3 EDKF 32, sealing range: 8-23 mm, IP 65
- IP 66 using AKMF cable glands, please order separately
- intrinsic fire resistance in accordance with DIN 4102 Part 12 (German standard) in combination with function-retaining cables
- tested with the cable manufacturer Dätwyler and Eupen for the intrinsic fire resistance E30 up to E90, see test certificate no.: P-MPA-E-15-018 valid till August 05, 2021, download available from www.hensel-electric.de > type - documents
- Tested for insulation integrity in accordance with BS EN 50200 in connection with insulation retaining cables, see test certificate, download available from www.hensel-electric.de > type - documents
- screw anchors enclosed can be used for concrete C20/25, limestone blocks KSV 12, building bricks MZ 12 and clinker bricks KS 12
- for normal environment and protected outdoor

rated insulation voltage	U_i = 400 V a.c./d.c.
current carrying capacity	41 A
tightening torque for terminal	2.0 Nm 0.5 Nm
material	PC-GFS (polycarbonate)

FK 1608

PH120 | E30 E60 E90 | IP 65/66

Cable junction box 1.5 mm², Cu
Connection box 1.5-2.5 mm², Cu



- 10-pole per pole 4 x 1.5 mm² sol and 2 x 2.5 mm² sol
- connecting terminal made from ceramic with resistance to high temperatures
- included cable entry: 4 EDKF 25, sealing range: Ø 9-17 mm, IP 65
- IP 66 using AKMF cable glands, please order separately
- intrinsic fire resistance in accordance with DIN 4102 Part 12 (German standard) in combination with function-retaining cables
- tested with the cable manufacturer Dätwyler and Eupen for the intrinsic fire resistance E30 up to E90, see test certificate no.: P-MPA-E-15-018 valid till August 05, 2021, download available from www.hensel-electric.de > type - documents
- Tested for insulation integrity in accordance with BS EN 50200 in connection with insulation retaining cables, see test certificate, download available from www.hensel-electric.de > type - documents
- screw anchors enclosed can be used for concrete C20/25, limestone blocks KSV 12, building bricks MZ 12 and clinker bricks KS 12
- for normal environment and protected outdoor

rated insulation voltage	U_i = 400 V a.c./d.c.
current carrying capacity	24 A
tightening torque for terminal	0.5 Nm
material	PC-GFS (polycarbonate)

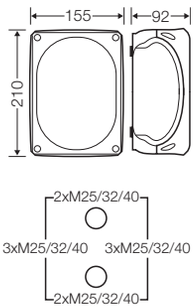
DK Cable junction boxes

Approved for intrinsic fire resistance and insulation integrity
With included grommets

FK 1610

PH120 | E30 E60 E90 | IP 65/66

Cable junction box 1.5-2.5 mm², Cu
Connection box 1.5-10 mm², Cu



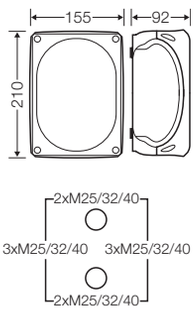
- 5-pole per pole 8 x 1.5 mm² sol, 4 x 2.5 mm² sol, 2 x 4 mm² sol, 2 x 6 mm² sol, 2 x 10 mm² sol
- connecting terminal made from ceramic with resistance to high temperatures
- included cable entry: 3 EDKF 32, sealing range: 8-23 mm, IP 65
- IP 66 using AKMF cable glands, please order separately
- intrinsic fire resistance in accordance with DIN 4102 Part 12 (German standard) in combination with function-retaining cables
- tested with the cable manufacturer Dätwyler and Eupen for the intrinsic fire resistance E30 up to E90, see test certificate no.: P-MPA-E-15-018 valid till August 05, 2021, download available from www.hensel-electric.de > type - documents
- Tested for insulation integrity in accordance with BS EN 50200 in connection with insulation retaining cables, see test certificate, download available from www.hensel-electric.de > type - documents
- screw anchors enclosed can be used for concrete C20/25, limestone blocks KSV 12, building bricks MZ 12 and clinker bricks KS 12
- for normal environment and protected outdoor

rated insulation voltage	U_i = 400 V a.c./d.c.
current carrying capacity	57 A
tightening torque for terminal	1,2 Nm
material	PC-GFS (polycarbonate)

FK 1616

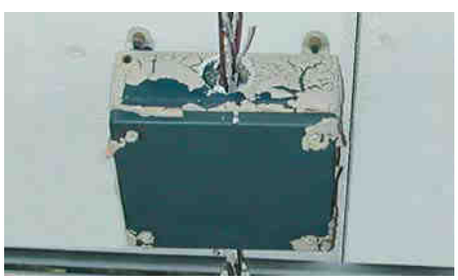
PH120 | E30 E60 E90 | IP 65/66

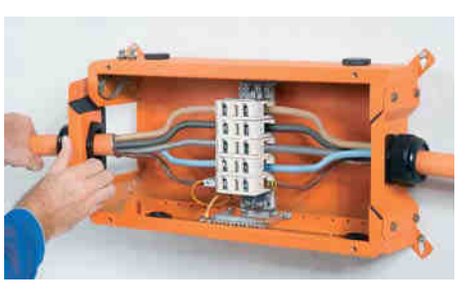
Cable junction box 1.5-6 mm², Cu
Connection box 1.5-16 mm², Cu



- 5-pole per pole 12 x 1.5 mm² sol, 8 x 2.5 mm² sol, 6 x 4 mm² sol, 4 x 6 mm² sol, 2 x 10 mm² sol, 2 x 16 mm² r
- connecting terminal made from ceramic with resistance to high temperatures
- included cable entry: 3 EDKF 40, sealing range: 11-30 mm, IP 65
- IP 66 using AKMF cable glands, please order separately
- intrinsic fire resistance in accordance with DIN 4102 Part 12 (German standard) in combination with function-retaining cables
- tested with the cable manufacturer Dätwyler and Eupen for the intrinsic fire resistance E30 up to E90, see test certificate no.: P-MPA-E-15-018 valid till August 05, 2021, download available from www.hensel-electric.de > type - documents
- Tested for insulation integrity in accordance with BS EN 50200 in connection with insulation retaining cables, see test certificate, download available from www.hensel-electric.de > type - documents
- screw anchors enclosed can be used for concrete C20/25, limestone blocks KSV 12, building bricks MZ 12 and clinker bricks KS 12
- for normal environment and protected outdoor

rated insulation voltage	U_i = 400 V a.c./d.c.
current carrying capacity	76 A
tightening torque for terminal	2.0 Nm
material	PC-GFS (polycarbonate)





DK Cable junction boxes

Approved for intrinsic fire resistance and insulation integrity

Cable entry via mounted grommets

- Intrinsic fire resistance in accordance with DIN 4102 Part 12 (German standard) in combination with function-retaining cables
- Insulation integrity PH120 in accordance with BS EN 50200 in combination with insulation retaining cables
- Protection against accidental contact is ensured by the enclosure
- External brackets for fastening
- Cable junction box for tunnel application for large conductor cross-sections up to 50 mm²
- Communication junction box E30 for the installation of connecting device for telecommunications
- Material: sheet steel, powder-coated
- Colour: orange, RAL 2003
- Resistance to impact: IK 10 (20 Joule)
- Degree of protection: IP 66
- Low fire load

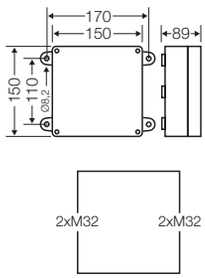
DK Cable junction boxes

Approved for intrinsic fire resistance and insulation integrity
Cable entry via mounted grommets

FK 9025

PH120 | E30 E60 E90 | IP 66

Cable junction box Ø 0.8 mm / 0.5-1.5 mm², Cu
Connection box Ø 0.8 mm / 0.5-4 mm², Cu



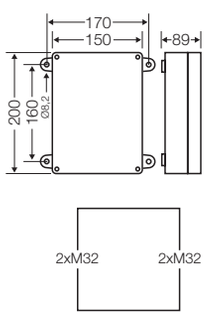
- 5-pole per pole 4 x Ø 0.8 mm / 0.5 mm² sol, 4 x 1.5 mm² sol, 2 x 2.5 mm² sol, 2 x 4 mm² sol
- connecting terminal made from ceramic with resistance to high temperatures
- mounted grommets 4 EDKF 32, sealing range: Ø 8-23 mm, closed
- intrinsic fire resistance in accordance with DIN 4102 Part 12 (German standard) in combination with function-retaining cables
- Tested with cable manufacturers Dätwyler, Eupen, Nexans, Studer, Pirelli and Lynenwerk for the intrinsic fire resistance E30 and E90, see test certificate no.: P-MPA-E-02-032, valid till March 20, 2018, download available from www.hensel-electric.de
- Tested for insulation integrity in accordance with BS EN 50200 in connection with insulation retaining cables, see test certificate, download available from www.hensel-electric.de > type - documents
- mounted using exterior wall fixings, bore hole 8.2 mm(for dowels refer to technical data)
- for normal environment and protected outdoor

rated insulation voltage	U_i = 400 V a.c./d.c.
current carrying capacity	32 A
tightening torque for terminal	0.5 Nm
material	Sheet steel, powder-coated

FK 9105

PH120 | E30 E60 E90 | IP 66

Cable junction box 1.5-4 mm², Cu
Connection box 1.5-10 mm², Cu



- 5-pole per pole 4 x 1.5 mm² sol, 4 x 2.5 mm² sol, 4 x 4 mm² sol, 2 x 6 mm² sol, 2 x 10 mm² sol
- connecting terminal made from ceramic with resistance to high temperatures
- mounted grommets 4 EDKF 32, sealing range: Ø 8-23 mm, closed
- intrinsic fire resistance in accordance with DIN 4102 Part 12 (German standard) in combination with function-retaining cables
- Tested with cable manufacturers Dätwyler, Eupen, Nexans, Studer, Pirelli and Lynenwerk for the intrinsic fire resistance E30 and E90, see test certificate no.: P-MPA-E-02-032, valid till March 20, 2018, download available from www.hensel-electric.de
- Tested for insulation integrity in accordance with BS EN 50200 in connection with insulation retaining cables, see test certificate, download available from www.hensel-electric.de > type - documents
- mounted using exterior wall fixings, bore hole 8.2 mm(for dowels refer to technical data)
- for normal environment and protected outdoor

rated insulation voltage	U_i = 400 V a.c./d.c.
current carrying capacity	40 A
tightening torque for terminal	1,2 Nm
material	Sheet steel, powder-coated

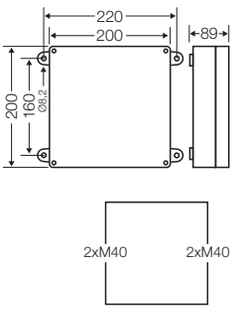
DK Cable junction boxes

Approved for intrinsic fire resistance and insulation integrity
Cable entry via mounted grommets

FK 9255

PH120 | E30 E60 E90 | IP 66

Cable junction box 1.5-6 mm², Cu
Connection box 1.5-16 mm², Cu



- 5-pole per pole 4 x 1.5 mm² sol, 4 x 2.5 mm² sol, 4 x 4 mm² sol, 4 x 6 mm² sol, 2 x 10 mm² sol, 2 x 16 mm² r (remove cable protection)
- connecting terminal made from ceramic with resistance to high temperatures
- mounted grommets 4 EDKF 40, sealing range Ø 11-30 mm, closed
- intrinsic fire resistance in accordance with DIN 4102 Part 12 (German standard) in combination with function-retaining cables
- Tested with cable manufacturers Dätwyler, Eupen, Nexans, Studer, Pirelli and Lynenwerk for the intrinsic fire resistance E30 and E90, see test certificate no.: P-MPA-E-02-032, valid till March 20, 2018, download available from www.hensel-electric.de
- Tested for insulation integrity in accordance with BS EN 50200 in connection with insulation retaining cables, see test certificate, download available from www.hensel-electric.de > type - documents
- mounted using exterior wall fixings, bore hole 8.2 mm(for dowels refer to technical data)
- for normal environment and protected outdoor

rated insulation voltage	U_i = 400 V a.c./d.c.
current carrying capacity	63 A
tightening torque for terminal	2.0 Nm
material	Sheet steel, powder-coated

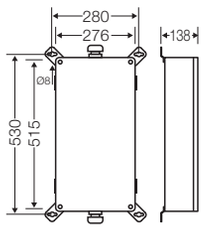
DK Cable junction boxes

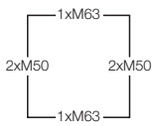
Approved for intrinsic fire resistance and insulation integrity
Cable entry via mounted grommets

FK 6505

E30 E60 E90 | IP 65

Cable junction box E90 16-35 mm², Cu, "r"
Connection box E90 16-50 mm², Cu, "r"





- 5-pole per pole 6 x 16 mm² r, 4 x 25 mm² r, 4 x 35 mm² r, 2 x 50 mm² r
- connecting terminal made from ceramic with resistance to high temperatures
- mounted cable entries 2 ASS 63, sealing range Ø 20-48 mm
- on the longitudinal sides each with 2 locking screws M 50
- intrinsic fire resistance in accordance with DIN 4102 Part 12 (German standard) in combination with function-retaining cables
- Tested with cable manufacturers Dätwyler, Prysmian and Eupen for the intrinsic fire resistance E90, see test certificate no.: P-1011 DMT DO, download at www.hensel-electric.de > Type - Documents
- mounted using exterior wall fixings, keyhole 8 mm (dowel refer to technical data)
- for normal environment and protected outdoor

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	150 A
tightening torque for terminal	4,0 Nm
material	External brackets for wall fixing: Stainless steel 1.4462, resistance class IV Enclosure including lid and outer screws: Stainless steel 1.4571, resistance class III powder-coated

Søknad:

For the connection of large cable cross sections up to 50 mm²

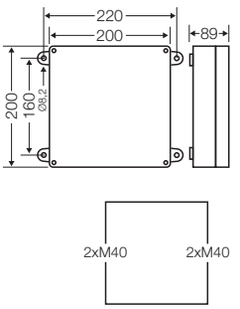
The cable junction box for tunnel application offers lot of space for wiring

DK Cable junction boxes

Approved for intrinsic fire resistance and insulation integrity
Cable entry via mounted grommets

FK 9259

Cable junction box 1.5-10 mm², Cu

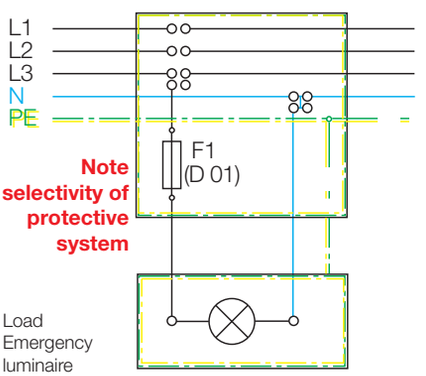


- cable junction box with fused outgoing unit
- D 01 neozed fuse base
- 5-pole terminal with 2 connecting terminals, 2 junction terminals and 2 PE terminals, each 1.5-10 mm² sol
- terminal block made from ceramic with resistance to high temperatures
- mounted grommets 4 EDKF 40, sealing range Ø 11-30 mm, closed
- intrinsic fire resistance E 30 in accordance with DIN 4102 part 12
- the use of this equipment requires the approval from the building and regulatory authorities for the individual case
- Tested with cable manufacturers Dätwyler and Nexans for the intrinsic fire resistance E30
- mounted using exterior wall fixings, bore hole 8.2 mm(for dowels refer to technical data)
- for normal environment and protected outdoor

rated insulation voltage	U_i = 400 V a.c.
current carrying capacity	40 A
tightening torque for terminal	2,0 -2,4 Nm
material	Sheet steel, powder-coated

FK 9259, with fused outgoing circuit
Can be used in emergency lighting in installations that cover a large area (e.g. tunnels).
The use of a fused branch circuit makes it possible to supply a group of emergency luminaires with one supply lead.
If one or several emergency luminaires are damaged during a fire, the back-up fuse is tripped and ensures that the power supply of the common supply lead is maintained.

The use of this equipment requires approval from the planning department and building control office for individual cases.



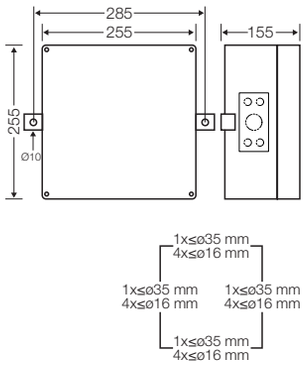
DK Cable junction boxes

Approved for Intrinsic Fire Resistance
Communication Box

FK 5000

E30 | IP 55

Communication junction box E30 for the installation of connecting device for telecommunications



- without terminals
- with mounting brackets for the installation of connecting device for telecommunications
- intrinsic fire resistance in accordance with DIN 4102 Part 12 (German standard) in combination with function-retaining cables
- cable entry via integrated elastic membranes
- cable entry on 4 sides each 1 x up to Ø 36 mm and 4 x up to Ø 14 mm
- the attached screw anchors must be used for concrete ≥ C20/25, B25 up to ≤ C50/60, B55
- the use of this equipment requires the approval from the building and regulatory authorities for the individual case
- general approval by the German building authorities DIBt: Z-86.1-37, Celsion fire protection systems, download at www.hensel-electric.de > FK 5000 - documents

material	Sheet steel, powder-coated

FK 5110

Connecting device for telecommunications screwless for 10 pairs

- LSA connection technology, solder and screwless, no insulation removal is required
- for installation on mounting brackets in FK 5000
- suitable for a solid conductor with diameter of 0.4 up to 0.8 mm or for two identical solid conductors with diameters of 0.4 up to 0.65 mm
- outer diameter of insulation 0.7 up to 1.6 mm
- with fixing screws

rated insulation voltage	U_i = 100 V a.c. U_i = 125 V d.c.
current carrying capacity	Solid conductor up to Ø 0.6 mm max. 2.1 A Solid conductor Ø 0.8 mm max. 5.0 A

FK 5120

Connecting device for telecommunications screwless for 20 pairs

- LSA connection technology, solder and screwless, no insulation removal is required
- for installation on mounting brackets in FK 5000
- suitable for a solid conductor with diameter of 0.4 up to 0.8 mm or for two identical solid conductors with diameters of 0.4 up to 0.65 mm
- outer diameter of insulation 0.7 up to 1.6 mm
- with fixing screws

rated insulation voltage	U_i = 100 V a.c. U_i = 125 V d.c.
current carrying capacity	Solid conductor up to Ø 0.6 mm max. 2.1 A Solid conductor Ø 0.8 mm max. 5.0 A

DK Cable junction boxes

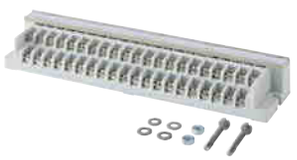
Approved for Intrinsic Fire Resistance
Communication Box

FK 5210

Connecting device for telecommunications
Screw-type connection for 10 pairs

- screw/screw connection technology
- for installation on mounting brackets in FK 5000
- suitable for a solid conductor with diameter of 0.4 up to 0.8 mm or for two identical solid conductors with diameters of 0.4 up to 0.65 mm
- with fixing screws
- with labelling strips

rated insulation voltage	U_i = 100 V a.c. U_i = 125 V d.c.
current carrying capacity	Solid conductor up to Ø 0.6 mm max. 2.1 A Solid conductor Ø 0.8 mm max. 5.0 A



FK 5220

Connecting device for telecommunications
screw-type connection for 20 pairs

- screw/screw connection technology
- for installation on mounting brackets in FK 5000
- suitable for a solid conductor with diameter of 0.4 up to 0.8 mm or for two identical solid conductors with diameters of 0.4 up to 0.65 mm
- with fixing screws
- with labelling strips

rated insulation voltage	U_i = 100 V a.c. U_i = 125 V d.c.
current carrying capacity	Solid conductor up to Ø 0.6 mm max. 2.1 A Solid conductor Ø 0.8 mm max. 5.0 A

AKMF 20

IP 66

Cable glands for knockouts M 20

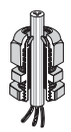
- sealing range Ø 6,5-13,5 mm
- ISO thread M 20 x 1.5
- bore-hole: Ø 20.3 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2-11: 960 °C

tightening torque	4.0 Nm

AKMF 25

IP 66

Cable glands for knockouts M 25



- sealing range Ø 11-17 mm
- ISO thread M 25 x 1.5
- bore-hole: Ø 25.3 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2-11: 960 °C

tightening torque	7.5 Nm

AKMF 32

IP 66

Cable glands for knockouts M 32

- sealing range Ø 15-21 mm
- ISO thread M 32 x 1.5
- bore-hole: Ø 32.3 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2-11: 960 °C

tightening torque	10.0 Nm

AKMF 40

IP 66

Cable glands for knockouts M 40

- sealing range: Ø 19-28 mm
- ISO thread M 40 x 1.5
- bore-hole: Ø 40.3 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2-11: 960 °C

tightening torque	10.0 Nm

ENYCASE®

DK Cable junction boxes

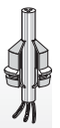
Approved for intrinsic fire resistance cable entry

EDKF 20

Grommets for knockouts M 20

IP 65/66

- sealing range: Ø 6-13 mm
- bore-hole: Ø 20.5 mm
- wall thickness 1.5-3.5 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C

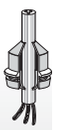


EDKF 25

Grommets for knockouts M 25

IP 65/66

- sealing range: Ø 9-17 mm
- bore-hole: Ø 25.5 mm
- wall thickness 1.5-3.5 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C

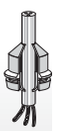


EDKF 32

Grommets for knockouts M 32

IP 65/66

- sealing range: Ø 8-23 mm
- bore-hole: Ø 32.5 mm
- wall thickness 1.5-3.5 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C

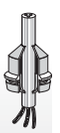


EDKF 40

Grommets for knockouts M 40

IP 65/66

- sealing range:Ø 11-30 mm
- bore-hole: Ø 40.5 mm
- wall thickness 1.5-3.5 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C



DK Cable junction boxes

for normal environment and protected outdoor

For cable trunking and conduit installation
Cable entry via knockouts

- Simply cut out cable trunking wall to the required width.
- Cables can be inserted from the front
- No threading of cables necessary!
- Supplied accessory: removable grommets DPS 02 (IP 54)
- The perfect installation solution for cable trunking!
- Gap closed: Removable trunking adapters for connection of cable trunkings to junction boxes.
- Labelling system: label template in the Internet at www.hensel-electric.de - downloads
- Stainless steel cover screws with quick fastening metric thread. Reducing cover fixing time.
- Material: polystyrene
- Burning behaviour: glow wire test in accordance with IEC 60695-2-11: 750 °C, flame-retardant, self-extinguishing
- Colour: grey, RAL 7035

DK Cable junction boxes

Cable entry via knockouts
For cable trunking and conduit installation

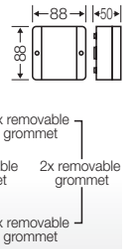
DP 9025

1.5-2.5 mm², Cu 3~

- with terminals
- 5-pole per pole 6 x 1.5 mm² sol, 4 x 2.5 mm² sol, 3 x 4 mm² sol
- for cable trunking and conduit installation
- included cable entry: 4 DPS 02, sealing range Ø 10-13,5 mm
- for normal environment and protected outdoor

rated insulation voltage	U_i = 690 V a.c./d.c.
tightening torque for terminal	1,2 Nm
material	PS (Polystyrene)

IP 54



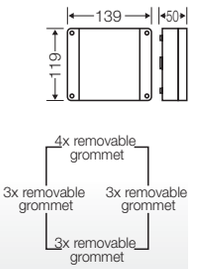
DP 9221

1.5-2.5 mm², Cu 3~

- with terminals
- 5-pole per pole 6 x 1.5 mm² sol, 4 x 2.5 mm² sol, 3 x 4 mm² sol
- for cable trunking and conduit installation
- included cable entry: 7 DPS 02, sealing range Ø 10-13,5 mm
- for normal environment and protected outdoor

rated insulation voltage	U_i = 690 V a.c./d.c.
tightening torque for terminal	1,2 Nm
material	PS (Polystyrene)

IP 54



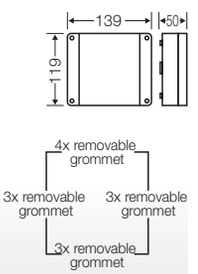
DP 9222

1.5-2.5 mm², Cu 3~

- with 2 terminals
- 5-pole per pole 6 x 1.5 mm² sol, 4 x 2.5 mm² sol, 3 x 4 mm² sol
- for cable trunking and conduit installation
- included cable entry: 7 DPS 02, sealing range Ø 10-13,5 mm
- for normal environment and protected outdoor

rated insulation voltage	U_i = 690 V a.c./d.c.
tightening torque for terminal	1,2 Nm
material	PS (Polystyrene)

IP 54



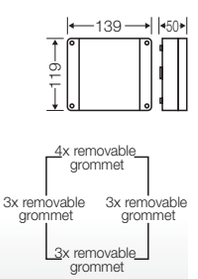
DPC 9225

1.5-2.5 mm², Cu 3~

- FIXCONNECT® plug-in terminal technology
- 5-pole per pole 4 x 1 x 1.5-2.5 mm² sol/f, terminal technology, see annex DK Cable junction boxes
- for cable trunking and conduit installation
- included cable entry: 4 DPS 02, sealing range Ø 10-13,5 mm
- for normal environment and protected outdoor

rated insulation voltage	U_i = 690 V a.c./d.c.
current carrying capacity	32 A
material	PS (Polystyrene)

IP 54



DK Cable junction boxes

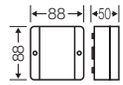
Cable entry via knockouts
For cable trunking and conduit installation

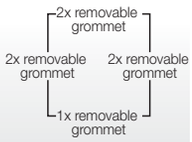
DP 9020

IP 54

- without terminals
- for cable trunking and conduit installation
- included cable entry: 4 DPS 02, sealing range Ø 10-13,5 mm
- for normal environment and protected outdoor

material	PS (Polystyrene)



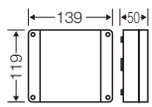


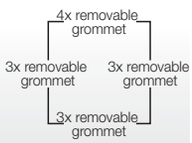
DP 9220

IP 54

- without terminals
- for cable trunking and conduit installation
- included cable entry: 7 DPS 02, sealing range Ø 10-13,5 mm
- for normal environment and protected outdoor

material	PS (Polystyrene)





ENYCASE®

DK Cable junction boxes

Cable entry via knockouts
For cable trunking and conduit installation

DPS 02

Removable grommet

IP 54

- degree of protection: IP 54 sealing range Ø 10-13.5 mm
- for retrofitting
- for cable junction boxes DP 9020, DP 9220, DP 9025, DP 9221, DP 9222, DP 9026, DPC 9225

ERA 20

Removable conduit adapter

IP 54

- degree of protection: IP 54 sealing range Ø 10-13.5 mm
- for wiring conduits M 20
- for cable junction boxes DP 9020, DP 9220, DP 9025, DP 9221, DP 9222, DP 9026, DPC 9225

EKA 20

Removable trunking adapter

IP 54

- degree of protection: IP 54 sealing range Ø 10-13.5 mm
- for mini trunking up to 20 x 20 mm
- for cable junction boxes DP 9020, DP 9220, DP 9025, DP 9221, DP 9222, DP 9026, DPC 9225

DK Cable junction boxes

for normal environment and protected outdoor

Cable entry via elastic membranes in the box walls

- No punching tool required - insert the conductor and it's done.
- Box wall with three cable entries
- Grommet supplied for sealing membranes in case of modificaions.
- Labelling system: label template in the Internet at www.hensel-electric.de - downloads
- Stainless steel cover screws with quick fastening metric thread. Reducing cover fixing time.
- Material: polystyrene
- Burning behaviour: glow wire test in accordance with IEC 60695-2-11: 750 °C, flame-retardant, self-extinguishing
- Colour: grey RAL 7035 or white RAL 9016

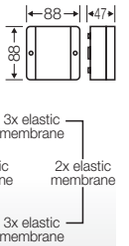
DK Cable junction boxes
Cable entry via elastic membranes

DE 9325

1.5-2.5 mm², Cu 3~

- with terminals
- 5-pole per pole 6 x 1.5 mm² sol, 4 x 2.5 mm² sol, 3 x 4 mm² sol
- 10 elastic membranes, closed cable entries, sealing range Ø 6.5-16 mm
- colour: grey, RAL 7035
- for normal environment and protected outdoor

IP 55



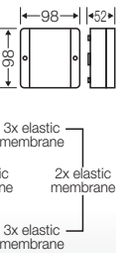
rated insulation voltage	U_i = 690 V a.c./d.c.
tightening torque for terminal	1,2 Nm
material	PS (Polystyrene)

DE 9345

1.5-4 mm², Cu 3~

- with terminals
- 5-pole per pole 6 x 1.5 mm² sol, 4 x 2.5 mm² sol, 3 x 4 mm² sol, 2 x 6 mm² sol
- 10 elastic membranes, closed cable entries, sealing range Ø 6.5-18 mm
- colour: grey, RAL 7035
- for normal environment and protected outdoor

IP 55



rated insulation voltage	U_i = 690 V a.c./d.c.
tightening torque for terminal	1,2 Nm
material	PS (Polystyrene)

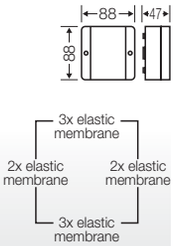
DK Cable junction boxes
Cable entry via elastic membranes

DE 9320

IP 55

- without terminals
- 10 elastic membranes, closed cable entries, sealing range Ø 6.5-16 mm
- colour: grey, RAL 7035
- for normal environment and protected outdoor

material	PS (Polystyrene)

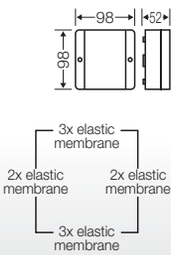


DE 9340

IP 55

- without terminals
- 10 elastic membranes, closed cable entries, sealing range Ø 6.5-18 mm
- colour: grey, RAL 7035
- for normal environment and protected outdoor

material	PS (Polystyrene)

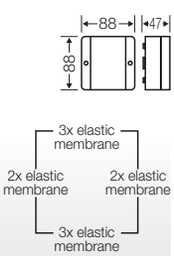


DE 9330

IP 55

- without terminals
- 10 elastic membranes, closed cable entries, sealing range Ø 6.5-16 mm
- with cable retention (2 pc.) for cable tie up to 6.5 mm width
- colour: grey, RAL 7035
- for normal environment and protected outdoor

material	PS (Polystyrene)

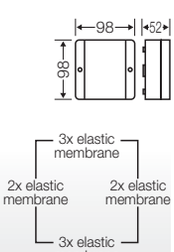


DE 9350

IP 55

- without terminals
- 10 elastic membranes, closed cable entries, sealing range Ø 6.5-18 mm
- with cable retention (2 pc.) for cable tie up to 6.5 mm width
- colour: grey, RAL 7035
- for normal environment and protected outdoor

material	PS (Polystyrene)



Accessories:

Cable retention with cable clip for fixing on the bottom

Cable retention via retention rings for cables

DK Cable junction boxes
Cable entry via elastic membranes

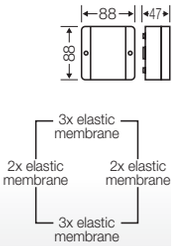
DE 9326

1.5-2.5 mm², Cu 3~

- with terminals
- 5-pole per pole 6 x 1.5 mm² sol, 4 x 2.5 mm² sol, 3 x 4 mm² sol
- 10 elastic membranes, closed cable entries, sealing range Ø 6.5-16 mm
- colour: white, RAL 9016
- for normal environment and protected outdoor

rated insulation voltage	U_i = 690 V a.c./d.c.
tightening torque for terminal	1,2 Nm
material	PS (Polystyrene)

IP 55



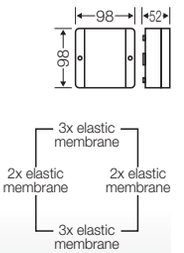
DE 9346

1.5-4 mm², Cu 3~

- with terminals
- 5-pole per pole 6 x 1.5 mm² sol, 4 x 2.5 mm² sol, 3 x 4 mm² sol, 2 x 6 mm² sol
- 10 elastic membranes, closed cable entries, sealing range Ø 6.5-18 mm
- colour: white, RAL 9016
- for normal environment and protected outdoor

rated insulation voltage	U_i = 690 V a.c./d.c.
tightening torque for terminal	1,2 Nm
material	PS (Polystyrene)

IP 55

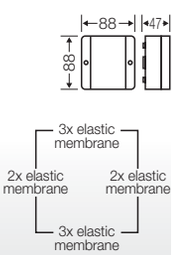


DE 9321

- without terminals
- 10 elastic membranes, closed cable entries, sealing range Ø 6.5-16 mm
- colour: white, RAL 9016
- for normal environment and protected outdoor

material	PS (Polystyrene)

IP 55

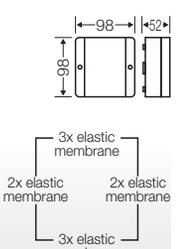


DE 9341

- without terminals
- 10 elastic membranes, closed cable entries, sealing range Ø 6.5-18 mm
- colour: white, RAL 9016
- for normal environment and protected outdoor

material	PS (Polystyrene)

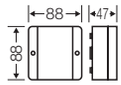
IP 55



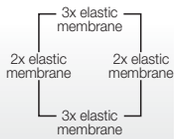
DK Cable junction boxes
Cable entry via elastic membranes

DE 9331

IP 55



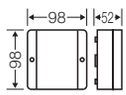
- without terminals
- 10 elastic membranes, closed cable entries, sealing range Ø 6.5-16 mm
- colour: white, RAL 9016
- with cable retention (2 pc.) for cable tie up to 6.5 mm width
- for normal environment and protected outdoor



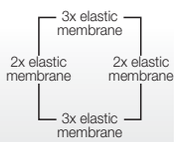
material	PS (Polystyrene)

DE 9351

IP 55



- without terminals
- 10 elastic membranes, closed cable entries, sealing range Ø 6.5-18 mm
- colour: white, RAL 9016
- with cable retention (2 pc.) for cable tie up to 6.5 mm width
- for normal environment and protected outdoor



material	PS (Polystyrene)

Accessories:

Cable retention with cable clip for fixing on the bottom

Cable retention via retention rings for cables

ENYCASE®

DK Cable junction boxes
Cable entry via elastic membranes

KHR 01

Cable retention for cable diameter 6.5 - 14 mm

- set with 10 x 6 cable rentention rings
- 30 pieces for cable diameter 6,5 - 10 mm
- 30 pieces for cable diameter 10 - 14 mm

KHR 02

Cable retention for cable diameter 10 - 16 mm

- set with 10 x 6 cable rentention rings
- 30 pieces for cable diameter 10 - 14 mm
- 30 pieces for cable diameter 13 - 16 mm

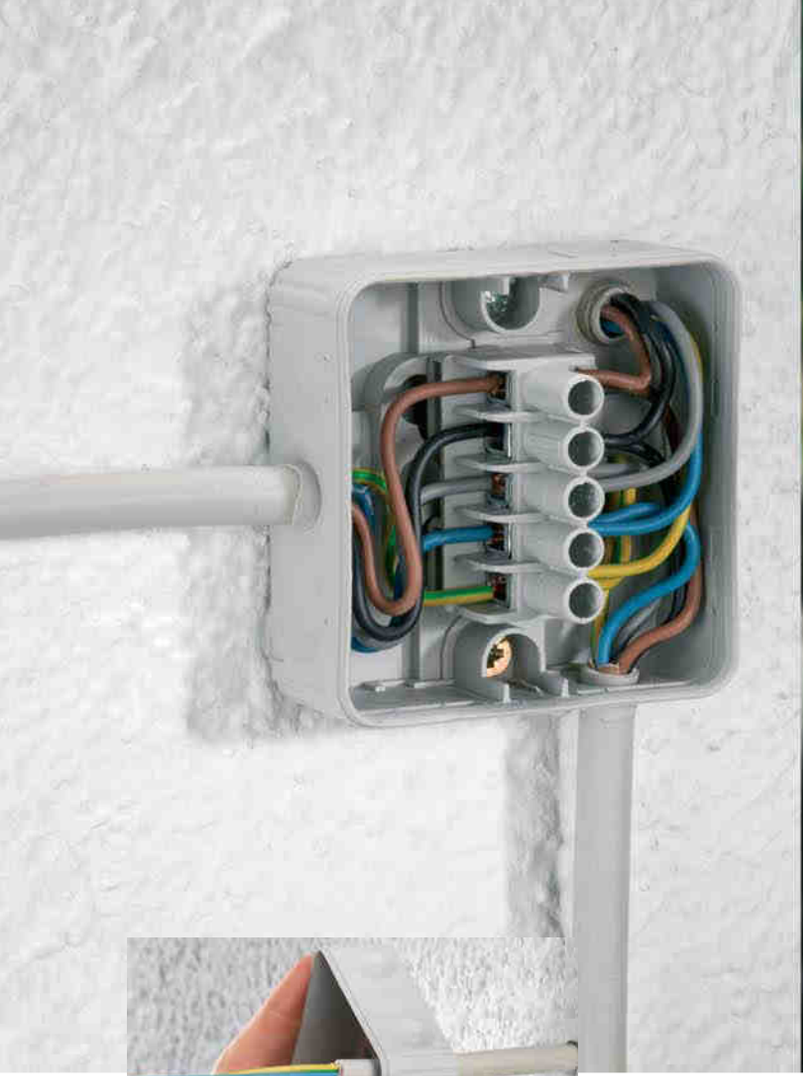
DK ZE 10

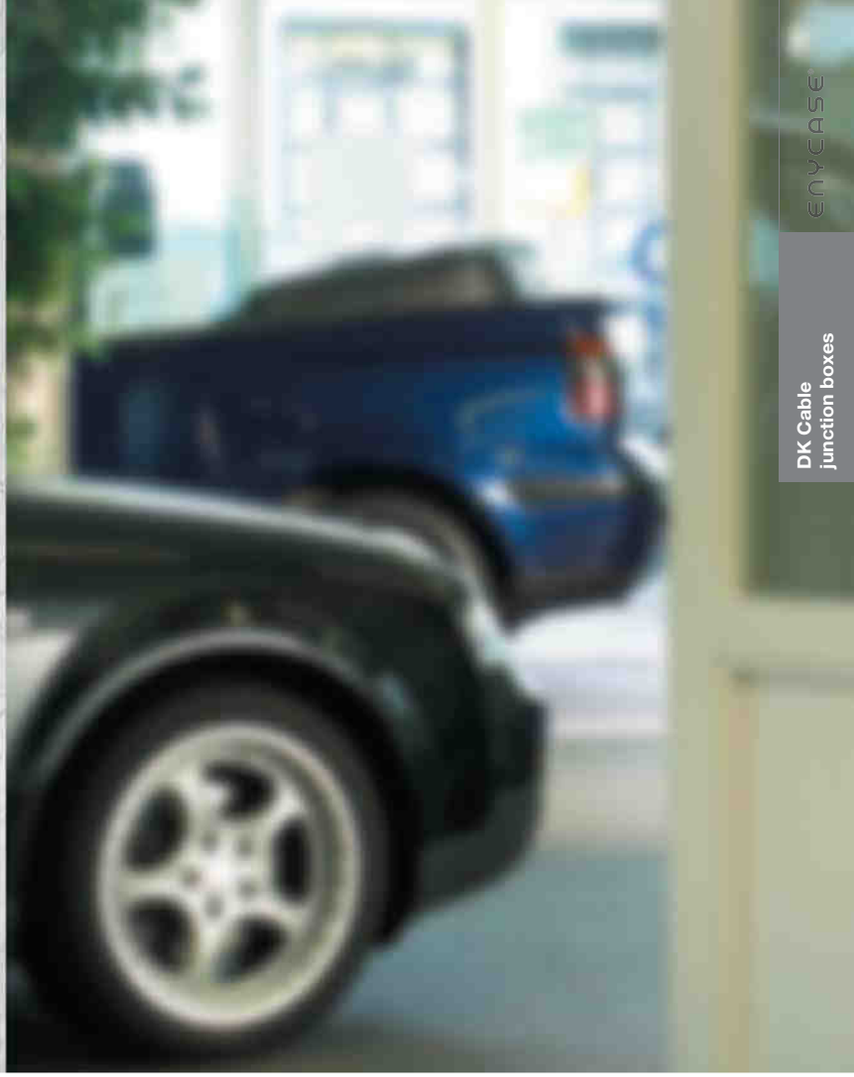
Cable retention

- set with 10 pieces
- for fixing in the bottom part of DK-cable junction boxes
- cable retention with cable clip up to 6.5 mm

DK ZE 10 Cable retention with cable clip for fixing on the bottom

KHR .. Cable retention via retention rings for cables





DK Cable junction boxes

For normal environment and protected outdoor

Cable entry via elastic membranes in bottom and box walls

- Cable entry from the rear via elastic membranes in the bottom
- Cable entry via elastic membranes in the bosx walls
- Lid for clip-on attachment. Reducing cover fixing time
- Flexible elastic membranes - no cable glands required. Push through and it‘s done!
- Material: PS (polystyrene)
- Burning behaviour: glow wire test in accordance with IEC 60695-2-11: 750 °C, flame-retardant, self-extinguishing
- Colour: grey RAL 7035 or white RAL 9016

ENYCASE®

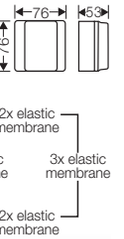
DK Cable junction boxes

Cable entry via elastic membranes in bottom and box walls

DE 9225

1.5-2.5 mm², Cu 3~

IP 55

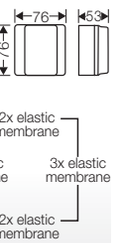


- with terminals
- 5-pole per pole 6 x 1.5 mm² sol, 4 x 2.5 mm² sol, 3 x 4 mm² sol
- box walls with 10 elastic membranes, closed, sealing range Ø 3-14 mm, bottom with 2 elastic membranes, closed
- lid with clip-on attachment
- colour: grey, RAL 7035
- for normal environment and protected outdoor

rated insulation voltage	U_i = 690 V a.c./d.c.
tightening torque for terminal	1,2 Nm
material	PS (Polystyrene)

DE 9220

IP 55



- without terminals
- box walls with 10 elastic membranes, closed, sealing range Ø 3-14 mm, bottom with 2 elastic membranes, closed
- lid with clip-on attachment
- with cable retention (2 pc.) for cable tie up to 6.5 mm width
- colour: grey, RAL 7035
- for normal environment and protected outdoor

material	PS (Polystyrene)

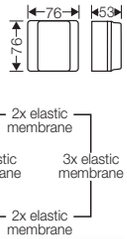
DK Cable junction boxes

cable entry via elastic membranes in bottom and box walls

DE 9226

1.5-2.5 mm², Cu 3~

IP 55

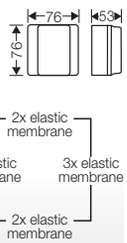


- with terminals
- 5-pole per pole 6 x 1.5 mm² sol, 4 x 2.5 mm² sol, 3 x 4 mm² sol
- box walls with 10 elastic membranes, closed, sealing range Ø 3-14 mm, bottom with 2 elastic membranes, closed
- lid with clip-on attachment
- colour: white, RAL 9016
- for normal environment and protected outdoor

rated insulation voltage	U_i = 690 V a.c./d.c.
tightening torque for terminal	1,2 Nm
material	PS (Polystyrene)

DE 9221

IP 55



- without terminals
- box walls with 10 elastic membranes, closed, sealing range Ø 3-14 mm, bottom with 2 elastic membranes, closed
- lid with clip-on attachment
- with cable retention (2 pc.) for cable tie up to 6.5 mm width
- colour: white, RAL 9016
- for normal environment and protected outdoor

material	PS (Polystyrene)

Accessories:

Cable retention with cable clip for fixing on the bottom

Cable retention via retention rings for cables

ENYCASE®

DK Cable junction boxes

cable entry via elastic membranes in bottom and box walls

DK ZE 10

Cable retention

- set with 10 pieces
- for fixing in the bottom part of DK-cable junction boxes
- cable retention with cable clip up to 6.5 mm

KHR 01

Cable retention for cable diameter 6.5 - 14 mm

- set with 10 x 6 cable rentention rings
- 30 pieces for cable diameter 6,5 - 10 mm
- 30 pieces for cable diameter 10 - 14 mm

KHR 02

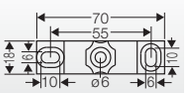
Cable retention for cable diameter 10 - 16 mm

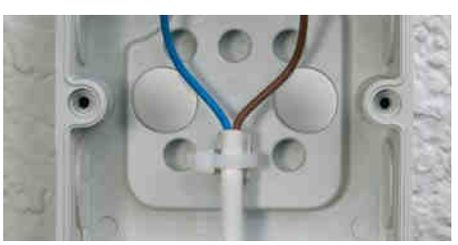
- set with 10 x 6 cable rentention rings
- 30 pieces for cable diameter 10 - 14 mm
- 30 pieces for cable diameter 13 - 16 mm

DE MB 10

Assembly bracket

- external brackets 10 units
- material: thermoplastics
- for quick installation of cable junction boxes DE 922. and DN 20..





DK ZE 10 Cable retention with cable clip for fixing on the bottom

KHR .. Cable retention via retention rings for cables

DK Cable junction boxes

Accessories

DIN rails	118
Terminals	119-121
Label for cable junction boxes	122
Cable feed-throughs for knockouts in the rear walls	122
Cable retention system	123
Removable grommets, removable trunking or conduit adapter	123
Labelling system for circuit descripton, sealing facility	124
Accessories for cable junction boxes from 70 mm² onwards	125-126

ENYCASE®

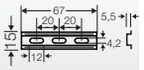
DK Cable junction boxes

„Weatherproof“, for outdoor installation
Accessories

DK TS 02

DIN rail

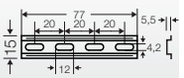
- for cable junction boxes DK 02...., KF 02....
- for the installation of terminal blocks
- with fixing screws



DK TS 04

DIN rail

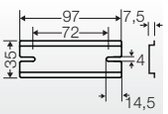
- for cable junction boxes DK 04 ...., KF 04....
- for the installation of terminal blocks
- with fixing screws



DK TS 06

DIN rail

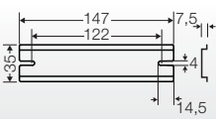
- for cable junction boxes DK 06.... , KF 06....
- for the installation of terminal blocks
- with fixing screws



DK TS 10

DIN rail

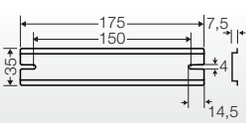
- for cable junction boxes DK 10...., KF 10....
- for the installation of terminal blocks
- with fixing screws



DK TS 16

DIN rail

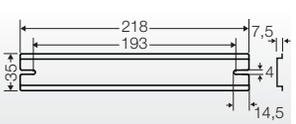
- for cable junction boxes DK 16...., KF 16....
- for the installation of terminal blocks
- with fixing screws



DK TS 25

DIN rail

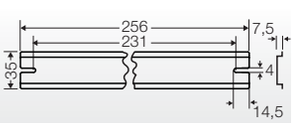
- for cable junction boxes DK 25...., KF 25....
- for the installation of terminal blocks
- with fixing screws



DK TS 35

DIN rail

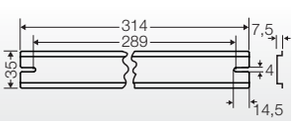
- for cable junction boxes DK 35...., KF 35....
- for the installation of terminal blocks
- with fixing screws



DK TS 50

DIN rail

- for cable junction boxes DK 50...., KF 50....
- for the installation of terminal blocks
- with fixing screws



DK KL 02

Rated connecting capacity: 1.5-4 mm², Cu

- terminal with 2 clamping units per pole
- 5-pole per pole 8 x 0,75 mm² f, 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 2 x 4 mm² sol / f
- current carrying capacity: 20 A
- for installation in cable junction boxes via terminal support
- can be used on terminal supports DK KH 02, DK KH 04 and DK KH 06

rated insulation voltage	U_i = 690 V a.c./d.c.
dismantling length	10 mm
tightening torque for terminal	0.5 Nm

DK KH 02

Support for terminals

- support for terminal DK KL 02
- can be used in cable junction boxes DK 02.. X, DK 02.. XX, KF 02.. X

DK KL 04

Rated connecting capacity: 1.5-6 mm², Cu

- terminal with 2 clamping units per pole
- 5-pole per pole 8 x 1,5 mm² sol / f, 6 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 2 x 6 mm² sol / f
- current carrying capacity: 32 A
- for installation in cable junction boxes via terminal support
- can be used on teminal supports DK KH 04 and DK KH 06

rated insulation voltage	U_i = 690 V a.c./d.c.
dismantling length	10 mm
tightening torque for terminal	0.7 Nm

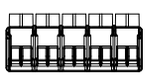
DK KH 04

Support for terminals

- support for terminals DK KL 02 and DK KL 04
- can be used in cable junction boxes DK 04.. X, DK 04.. XX, KF 04.. X

DK KL 06

Rated connecting capacity: 1.5-10 mm², Cu



- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 1,5 mm² sol / f, 4 x 2,5 mm² sol / f, 4 x 4 mm² sol / f, 4 x 6 mm² sol / f, 2 x 10 mm² sol / f
- current carrying capacity: 40 A
- for installation in cable junction boxes via terminal support
- can be used on terminal support DK KH 06

rated insulation voltage	U_i = 690 V a.c./d.c.
dismantling length	12 mm
tightening torque for terminal	1.5 Nm

ENYCASE®

DK Cable junction boxes

„Weatherproof“, for outdoor installation
Accessories

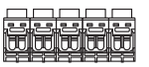
DK KH 06

Support for terminals

- support for terminals DK KL 02, DK KL 04 and DK KL 06
- can be used in cable junction boxes DK 06.. X, DK 06.. XX, DK 10.. X, DK 10..XX, KF 06.. X and KF 10.. X

DK KS 10

Rated connecting capacity: 2.5-16 mm², Cu



- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 2.5 mm² sol, 4 x 4 mm² sol, 4 x 6 mm² sol, 4 x 10 mm² sol, 2 x 16 mm² s
- current carrying capacity: 63 A
- for insertion in cable junction boxes
- for cable junction boxes DK 10.. X, DK 10.. XX, KF 10.. X
- complete with fixing elements

rated insulation voltage	U_i = 690 V a.c./d.c.
dismantling length	11 mm
tightening torque for terminal	2.0 Nm

DK KS 16

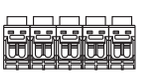
Rated connecting capacity 6-25 mm², Cu

- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 6 mm² sol, 6 x 10 mm² sol/ f*, 4 x 16 mm² s/ f*, 4 x 25 mm² s/ f*, 2 x 35 mm² s/ f*
  f* = with gas-tight end ferrule
- current carrying capacity: 102 A
- for insertion in cable junction boxes
- for cable junction boxes DK 16.. X, DK 16.. XX, KF 16.. X
- complete with fixing elements

rated insulation voltage	U_i = 690 V a.c./d.c.
dismantling length	16 mm
tightening torque for terminal	3.0 Nm

DK KS 25

Rated connecting capacity: 6-35 mm², Cu

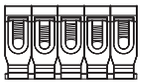


- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 6 mm² sol, 6 x 10 mm² sol/ f*, 4 x 16 mm² s/ f*, 4 x 25 mm² s/ f*, 2 x 35 mm² s/ f*
  f* = with gas-tight end ferrule
- current carrying capacity: 102 A
- for insertion in cable junction boxes
- for koblingsboxer DK 25.. X, DK 25.. XX, KF 25.. X
- complete with fixing elements

rated insulation voltage	U_i = 690 V a.c./d.c.
dismantling length	16 mm
tightening torque for terminal	3.0 Nm

DK KS 35

Rated connecting capacity 16-35 mm², Cu

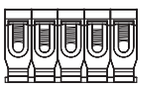


- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 16 mm² s, 4 x 25 mm² s, 4 x 35 mm² s, 2 x 50 mm² s
- current carrying capacity: 125 A
- for insertion in cable junction boxes
- for cable junction boxes DK 35...., KF 35....
- complete with fixing elements

rated insulation voltage	U_i = 690 V a.c./d.c.
dismantling length	20 mm
tightening torque for terminal	12.0 Nm

DK KS 50

Rated connecting capacity: 16-50 mm², Cu



- terminal with 2 clamping units per pole
- 5-pole per pole 6 x 16 mm² s, 4 x 25 mm² s, 4 x 35 mm² s, 4 x 50 mm² s
- current carrying capacity: 150 A
- for insertion in cable junction boxes
- for cable junction boxes DK 50...., KF 50....
- complete with fixing elements

rated insulation voltage	U_i = 690 V a.c./d.c.
dismantling length	20 mm
tightening torque for terminal	12.0 Nm

ENYCASE®

DK Cable junction boxes
„Weatherproof“, for outdoor installation
Accessories

DK BZ 5

Labelling material

- set with 5 pieces
- for cable junction boxes types DK ...., RK ...., KF .... or FK .... from 2.5 to 50 mm², connectable to base of the box
- for attaching of labelling strips or marking with felt tip pen
- inscribable surface 24 x 41 mm
- suitable for labelling according to the identification system for power stations "KKS"

material	PC (polycarbonate)

LDM 25 G

IP 66/67

Cable feed-through for knockouts in the rear wall M 25

- sealing range: Ø 8-17 mm
- bore-hole: Ø 25.5 mm
- wall thickness 0.5-3.5 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 55 °C
- Glow wire test IEC 60695-2-11: 750 °C

material	TPE (-25° to +80°C)

LDM 25 B

IP 66/67

Cable feed-through for knockouts in the rear wall M 25

- sealing range: Ø 8-17 mm
- bore-hole: Ø 25.5 mm
- wall thickness 0.5-3.5 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 55 °C
- Glow wire test IEC 60695-2-11: 750 °C

material	TPE (-25° to +80°C)

LDM 32 G

IP 66/67

Cable feed-through for knockouts in the rear wall M 32

- sealing range: Ø 12-24 mm
- bore-hole: Ø 32.5 mm
- wall thickness 0,5-4,5 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 55 °C
- Glow wire test IEC 60695-2-11: 750 °C

material	TPE (-25° to +80°C)

LDM 32 B

IP 66/67

Cable feed-through for knockouts in the rear wall M 32

- sealing range: Ø 12-24 mm
- bore-hole: Ø 32.5 mm
- wall thickness 0,5-4,5 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 55 °C
- Glow wire test IEC 60695-2-11: 750 °C

material	TPE (-25° to +80°C)

KHR 01

Cable retention
for cable diameter 6.5 - 14 mm

- set with 10 x 6 cable rentention rings
- 30 pieces for cable diameter 6,5 - 10 mm
- 30 pieces for cable diameter 10 - 14 mm

KHR 02

Cable retention
for cable diameter 10 - 16 mm

- set with 10 x 6 cable rentention rings
- 30 pieces for cable diameter 10 - 14 mm
- 30 pieces for cable diameter 13 - 16 mm

DKL 04

Rated connecting capacity: 1.5-6 mm², Cu

- for insertion in cable junction boxes
- 5-pole per pole 6 x 1.5 mm² sol, 4 x 2.5 mm² sol, 3 x 4 mm² sol, 2 x 6 mm² sol
- for cable junction boxes D 8020, D 8120, D 8040, D 9020, D 9120, D 9040, D 9220, DP 9020, DP 9220, DE 9320, DE 9321, DE 9340, DE 9341
- complete with fixing elements

rated insulation voltage	U_i = 690 V a.c./d.c.
dismantling length	11 mm
tightening torque for terminal	1,2 Nm

DPS 02

Removable grommet

IP 54

- degree of protection: IP 54 sealing range Ø 10-13.5 mm
- for retrofitting
- for cable junction boxes DP 9020, DP 9220, DP 9025, DP 9221, DP 9222, DP 9026, DPC 9225

EKA 20

Removable trunking adapter

IP 54

- degree of protection: IP 54 sealing range Ø 10-13.5 mm
- for mini trunking up to 20 x 20 mm
- for cable junction boxes DP 9020, DP 9220, DP 9025, DP 9221, DP 9222, DP 9026, DPC 9225

ERA 20

Removable conduit adapter

IP 54

- degree of protection: IP 54 sealing range Ø 10-13.5 mm
- for wiring conduits M 20
- for cable junction boxes DP 9020, DP 9220, DP 9025, DP 9221, DP 9222, DP 9026, DPC 9225

DK BS 5

Labelling system for circuit description

- set with 5 pieces
- for cable junction boxes tpye D from 2.5 to 50 mm², can be inserted into cover fixing ducts.
- for attaching of labelling strips or marking with felt tip pen
- inscribable surface of 45 x 30 mm
- suitable for labelling according to the identification system for power stations "KKS"
- label template on the Internet at www.hensel-electric.de - download area
- cannot be used in cable junction boxes type D 2.5 to 4 mm² with sealing facility

material	PC (polycarbonate)

PLS 06

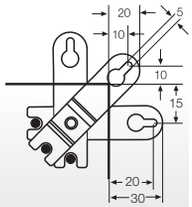
Sealing device

- for retrofitting, without sealing wire and without seal
- for cable junction boxes 2.5 mm²: DE 9x2x, DP 9x2x, DPC 9225
- for cable junction boxes 4 mm²: DE 9x4x

Mi AL 40

4 stainless steel external brackets

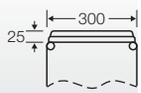
- for external fixing of enclosures



Mi FM 40

Flange
knockouts: 2 x M 25/32, 5 x M 32/40

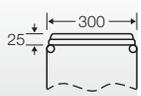
- box wall 300 mm
- with fixing wedges and seal



Mi FM 50

Flange
knockouts: 2 x M 20, 4 x M 32/40/50

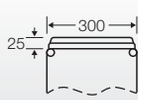
- box wall 300 mm
- with fixing wedges and seal



Mi FM 60

Flange
knockouts: 3 x M 40/50/63

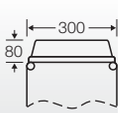
- box wall 300 mm
- with fixing wedges and seal



Mi FM 63

Flange with cable arrangement space
knockouts: 3 x M 40/50/63

- box wall 300 mm
- with fixing wedges and seal

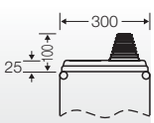


Mi FP 70

Flange
sealing range: 1 x Ø 30-72 mm

- box wall 300 mm
- with fixing wedges and seal

IP 65

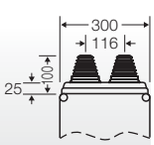


Mi FP 72

Flange
sealing range: 2 x each Ø 30-72 mm

- box wall 300 mm
- with fixing wedges and seal

IP 65



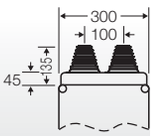
DK Cable junction boxes

Accessories for cable junction boxes from 70 mm² onwards

Mi FP 82

Cable insert
sealing range: 2 x each Ø 30-72 mm

- box wall 300 mm
- divisible for cable insertion from the front
- degree of protection IP 54 only with additional strain and pressure relief (e.g. Mi ZE 62)



KST 82

Stepped grommet
sealing range: Ø 30-72 mm

- for retrofitting of cable insertion Mi FP 82
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C

Mi ZE 62

Cable strain relief
for 2 cables with max. 60 mm external diameter

- with fixing rail 284 mm long
- to be used only in connection with cable insertion Mi FP 82

Mi SA 2

Dust protection cover

- for box sizes 1 to 4
- for 2 lid fittings

DK Cable junction boxes

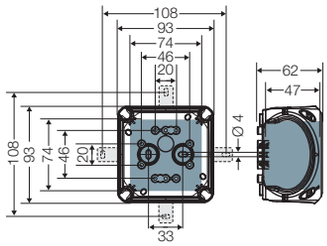
Technical details

Dimensions in mm	128-131
Terminals	132-135
Operating and ambient conditions	136-138
Standards and regulations	139
Technical details FK cable junction boxes with intrinsic fire resistance	140-141

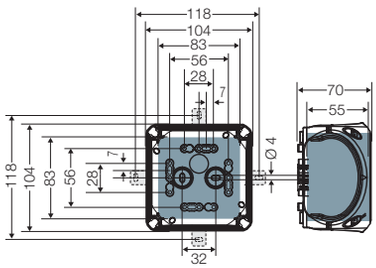
DK Cable junction boxes

Technical details
Dimensions in mm

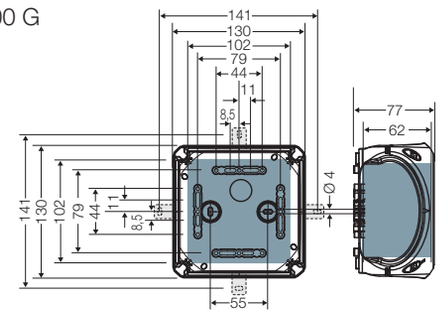
DK 0200 G
DK 0200 R



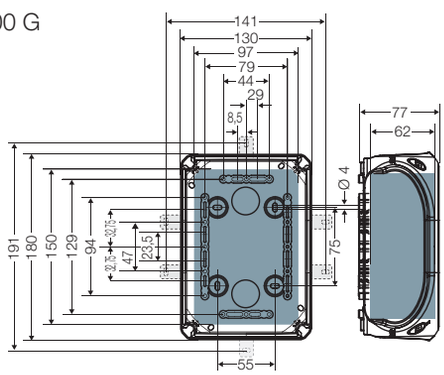
DK 0400 G
DK 0400 R



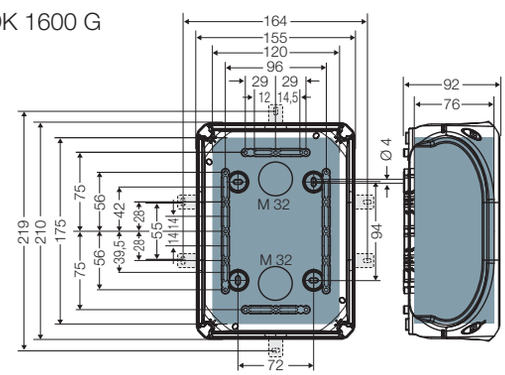
DK 0600 G



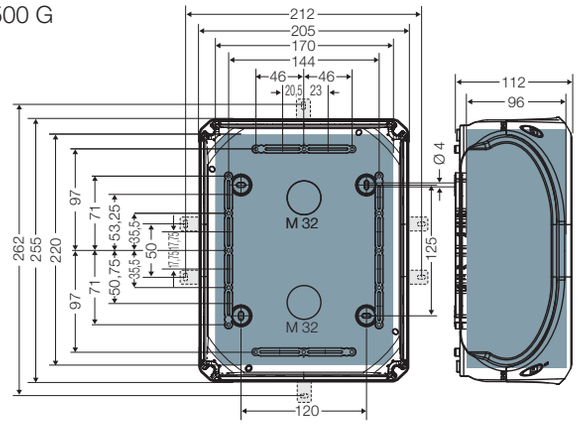
DK 1000 G



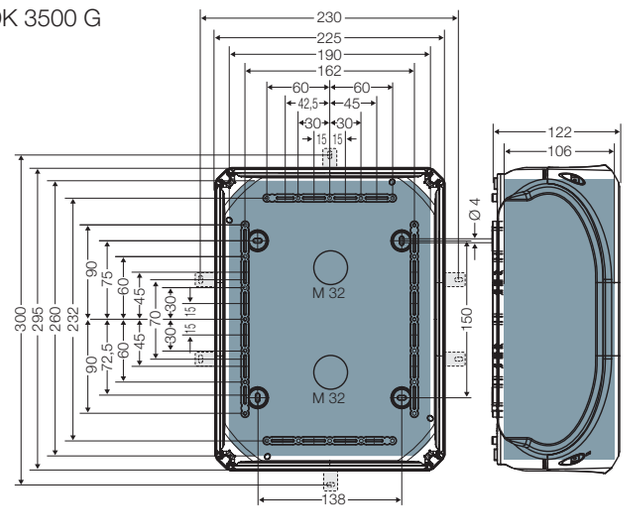
DK 1600 G



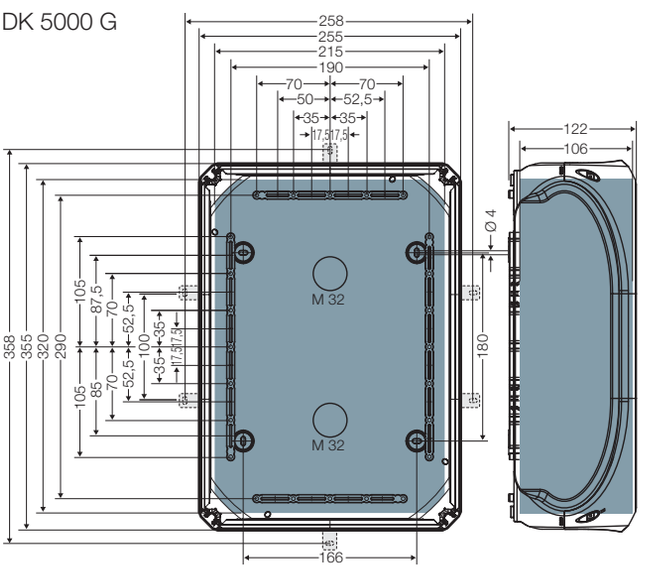
DK 2500 G



DK 3500 G



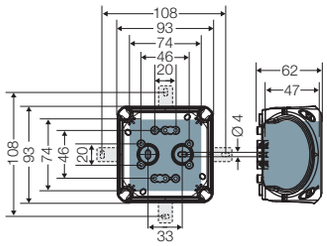
DK 5000 G



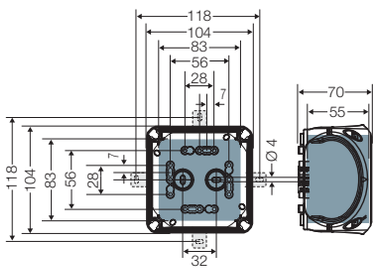
DK Cable junction boxes

Technical details
Dimensions in mm

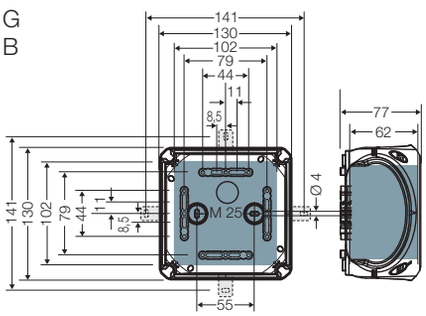
KF 0200 G
KF 0200 B



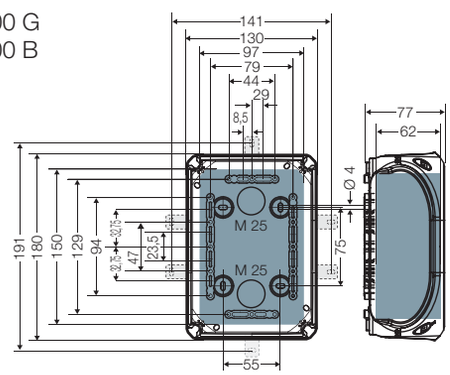
KF 0400 G
KF 0400 B



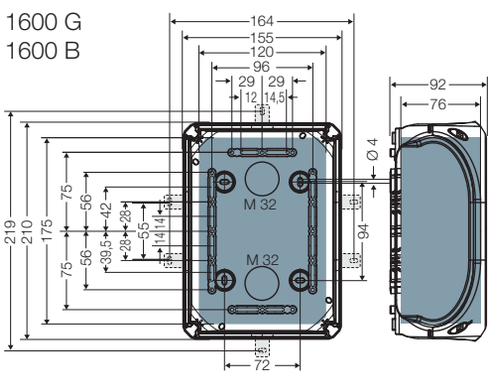
KF 0600 G
KF 0600 B



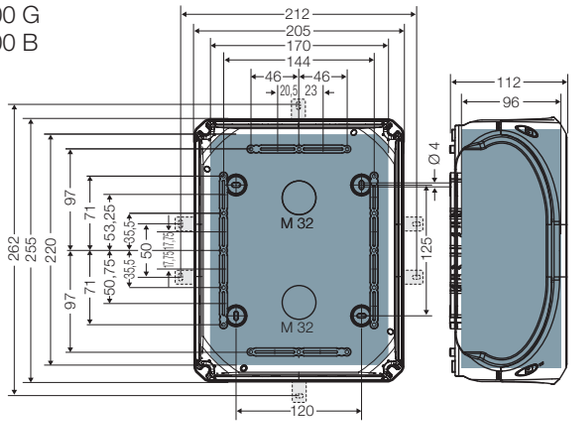
KF 1000 G
KF 1000 B



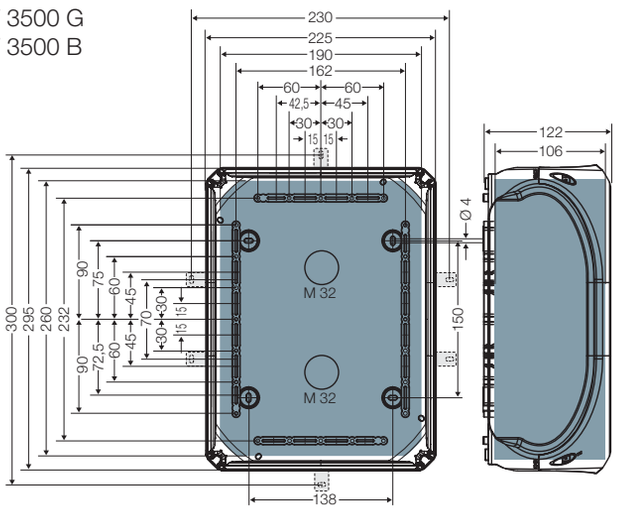
KF 1600 G
KF 1600 B



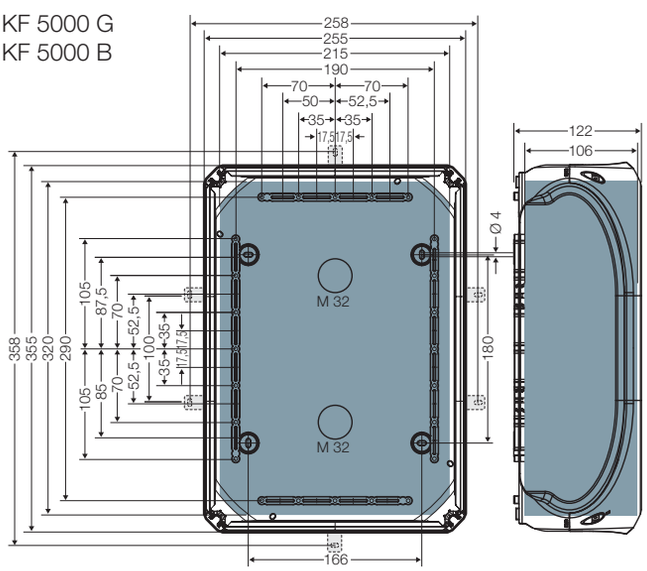
KF 2500 G
KF 2500 B



KF 3500 G
KF 3500 B



KF 5000 G
KF 5000 B

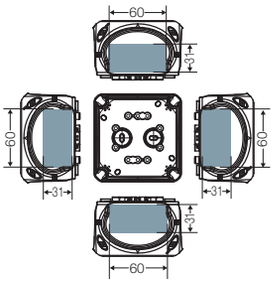


= usable installation space
with mounted cable glands

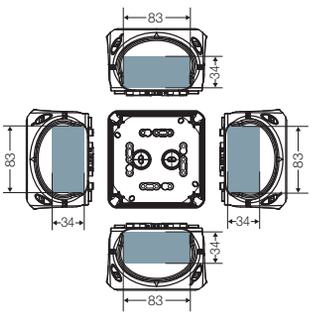
DK Cable junction boxes

Technical details
Dimensions in mm of box walls without knockouts

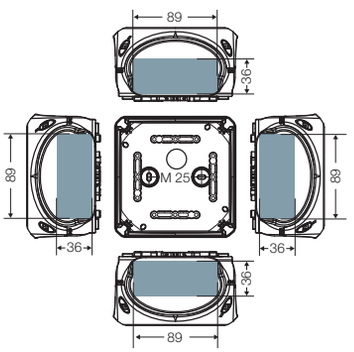
KF 0200 H
KF 0200 C



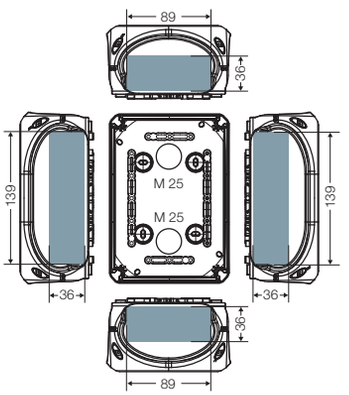
KF 0400 H
KF 0400 C



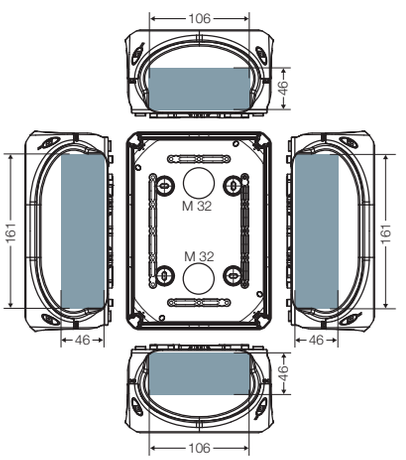
KF 0600 H
KF 0600 C



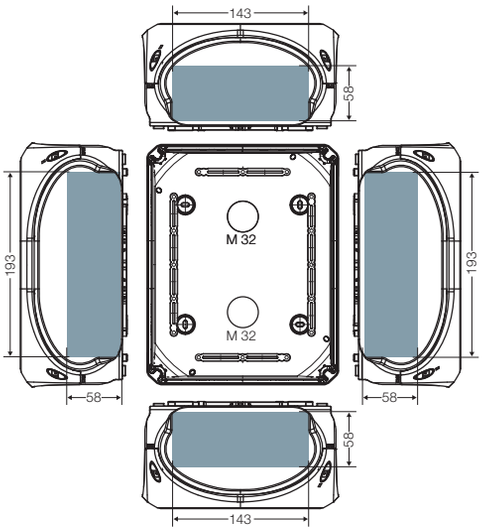
KF 1000 H
KF 1000 C



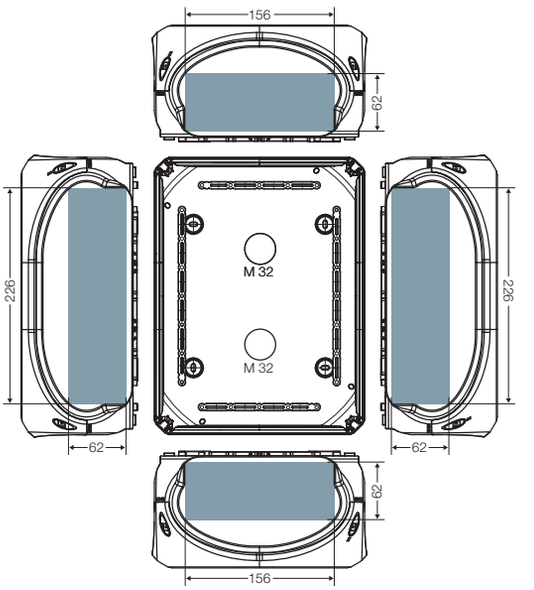
KF 1600 H
KF 1600 C



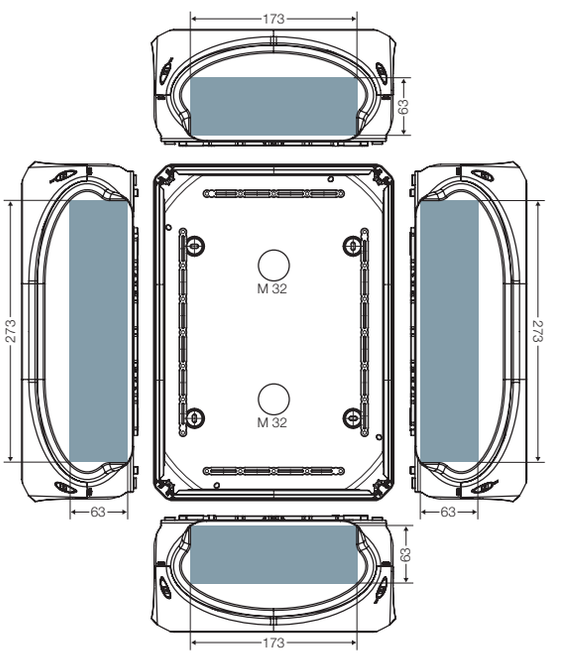
KF 2500 H
KF 2500 C



KF 3500 H
KF 3500 C



KF 5000 H
KF 5000 C

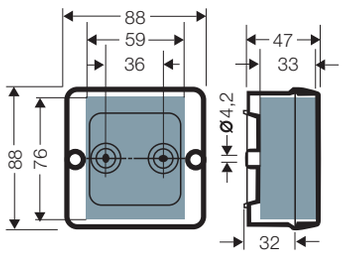


= usable installation area in box walls

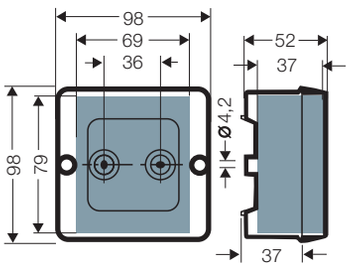
DK Cable junction boxes

Technical details
Dimensions in mm

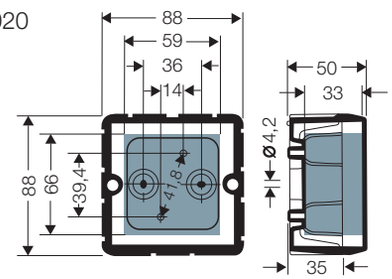
DE 9320
DE 9321



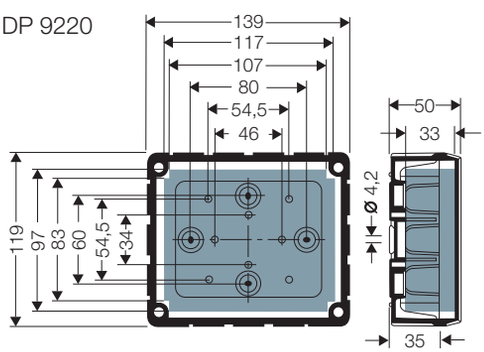
DE 9340
DE 9341



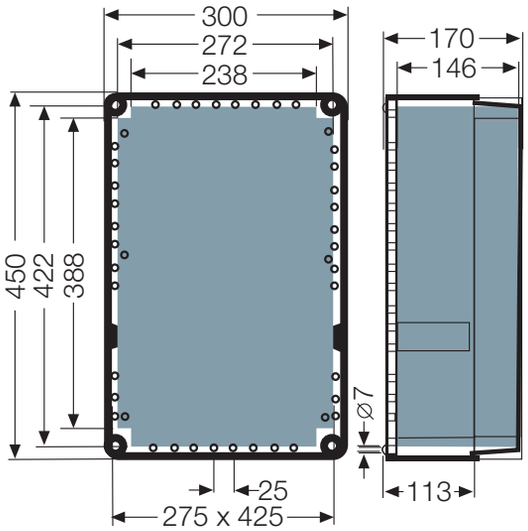
DP 9020



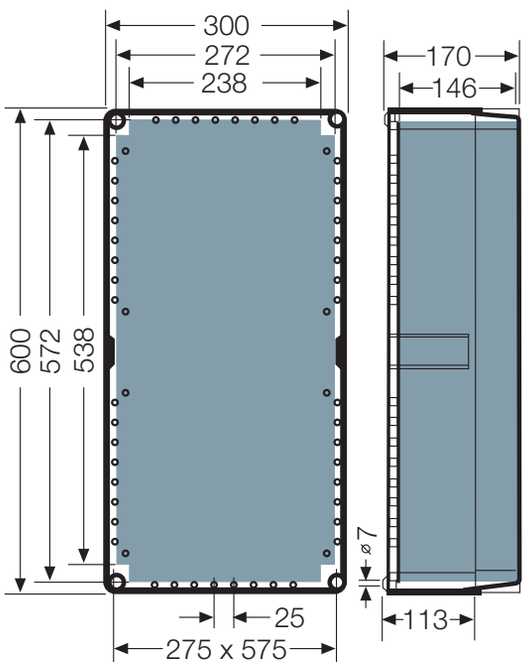
DP 9220



K 7055
K 7004
K 7005
K 7042
K 7052
K 9951
K 1204
K 1205



K 2401
K 2404
K 2405



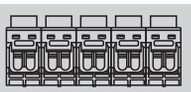
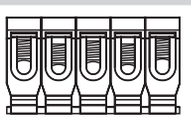
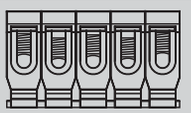
= usable installation space
with mounted cable glands

ENYCASE®

DK Cable junction boxes

Technical details
Terminals

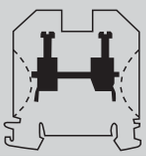
Connecting terminals for copper conductors (Cu)
Hint: The connection of different types of conductors and/or different cross-sections at one clamping unit is not permitted.
f[1] = flexible with end ferrule

Type of terminal	Fixed in cable junction boxes	Clamping units per pole	Rated connecting capacity mm² and types of conductors	Conductors to be connected per pole	Tightening torque	Current carrying capacity	Rated cross section of terminal
 **DK KL 02**	**DK 0202 G, DK 0402 G,** **DK 0202 R, DK 0402 R** **KF 0202 G, KF 0202 B** **KF 0402 G, KF 0402 B** **WP 0202 G, WP 0202 B** **WP 0402 G, WP 0402 B**	2	4 sol/f 2.5 sol/f 1.5 sol/f 0.75 f	1-2 1-4 1-6 1-8	0.5 Nm	20 A	**4 mm²**
 **DK KL 04**	**DK 0404 G, DK 0604 G,** **DK 0404 R, DK 0604 R** **KF 0404 G, KF 0404 B** **KF 0604 G, KF 0604 B** **WP 0404 G, WP 0404 B** **WP 0604 G, WP 0604 B**	2	6 sol/f 4 sol/f 2.5 sol/f 1.5 sol/f	1-2 1-4 1-6 1-8	0.7 Nm	32 A	**6 mm²**
 **DK KL 06**	**DK 0606 G, DK 1006 G** **KF 0606 G, KF 0606 B** **KF 1006 G, KF 1006 B** **WP 0606 G, WP 0606 B**	2	10 sol/f 6 sol/f 4 sol/f 2.5 sol/f 1.5 sol/f	1-2 1-4 1-4 1-4 1-6	1.5 Nm	40 A	**10 mm²**
 **DK KS 10**	**DK 1010 G, DK 1610 G** **KF 1010 G, KF 1010 B** **KF 1610 G, KF 1610 B** **WP 1010 G, WP 1010 B**	2	16 s 10 sol 6 sol 4 sol 2.5 sol. f[1]	1-2 1-4 1-4 1-4 2-6	2 Nm	63 A	**16 mm²**
 **DK KS 16**	**DK 1616 G** **KF 1616 G** **KF 1616 B**	2	35 s. f[1] 25 s. f[1] 16 s. f[1] 10 sol. f[1] 6 sol	1-2 1-4 1-4 1-6 1-6	3 Nm	102 A	**35 mm²**
 **DK KS 25**	**DK 2525 G** **KF 2525 G** **KF 2525 B**	2	35 s. f[1] 25 s. f[1] 16 s. f[1] 10 sol. f[1] 6 sol	1-2 1-4 1-4 1-6 1-6	3 Nm	102 A	**35 mm²**
 **DK KS 35**	**DK 3535 G** **KF 3535 G** **KF 3535 B**	2	50 s 35 s 25 s 16 s	1-2 1-4 1-4 1-6	12 Nm	125 A	**50 mm²**
 **DK KS 50**	**DK 5054 G** **DK 5055 G**	2	50 s 35 s 25 s 16 s	1-4 1-4 1-4 1-6	12 Nm	150 A	**50 mm²**

DK Cable junction boxes

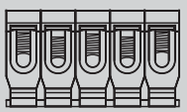
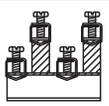
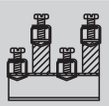
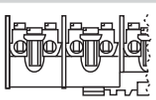
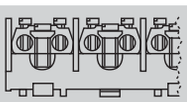
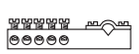
Technical details
Terminals

Terminal blocks for copper- (Cu) and aluminium conductors (Alu)

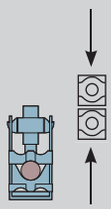
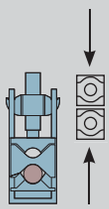
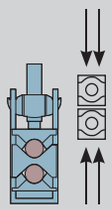
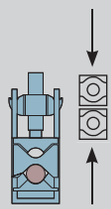
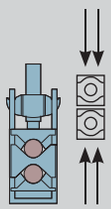
Fixed in cable junction boxes	Type	Clamping units per pole	Corresponding cross-section mm²	Conductors to be connected per pole	Cross-sections and types of conductors f = flexible wire f¹ = flexible wire with end ferrule sol = solid wire s = stranded wire r = rigid (solid and stranded)	Tightening torque	Current carrying capacity	Terminal design/ nominal cross-section of terminal	International approvals of terminal blocks CH/SEV · N/Nemko · DK/Demko · N/KEMA · SF/SETI · Canada/CSA · USA
	Manufacturer Wieland:								
RK 0203 T, RK 0205 T, RK 0207 T	WKM 2.5/15 rated voltage AC/DC 500 V	2	2.5 1.5	2	f/f¹ = 0.5-2.5 sol = 0.5-4 s = 1.5-2.5	0,4 Nm	24 A		● ○ ● ○ ○ ● ●
RK 0405 T, RK 0610 T	WKM 4/15 rated voltage AC/DC 500 V	2	4 2.5 1.5	2	f/f¹ = 0.5-4 sol = 0.5-6 s = 1.5-4	0,5 Nm	32 A		● ○ ○ ○ ● ●
RK 0612 T, RK 0614 T RK 1019 T, RK 1024 T	WK 4/U rated voltage AC/DC 800 V	2	4 2.5 1.5	2	f/f¹ = 0.5-4 sol = 0.5-6 s = 1.5-4	0,5 Nm	41 A		● ○ ○ ● ○ ● ●
	Manufacturer Weidmüller:								
DK 0402 A	AKZ 2.5 rated voltage AC/DC 250 V	4	2.5 1.5	4	f/f¹ sol = 0.5-2.5 s = 1.5-2.5	0,5 Nm	20 A		● ○ ○ ○ ● ● ●
DK 0604 A	AKZ 4 rated voltage AC/DC 400 V	4	4 2.5 1.5	4	f/sol = 0.5-4 s = 1.5-4 f¹ = 0.5-2.5	0,6 Nm	20 A		● ● ● ● ○ ● ●
DK 2516 A	WDU 16 N rated voltage AC/DC 690 V	4	16 10 6	4	f¹/sol = 1.5-16 f/s = 1.5-25	3,0 Nm	76 A		● ● ○ ● ● ● ●
K 7051	-	4	2.5-50	4	r = 2.5-50	10.0 Nm	Cu 150 A Alu 120 A		
KF 9251 KF 9501	-	2	1.5-50	2	r = 1.5-50	1.5 Nm to 12 Nm	Cu/Alu 150 A		
K 9951	-	4	6-95	4	r = 6-95	12 Nm to 22 Nm	Cu/Alu 490 A		
K 2401	-	4	35-240	4	r = 35-240	26 Nm to 55 Nm	Cu/Alu 850 A		

DK Cable junction boxes
Technical details
Terminals

Connecting terminals for copper conductors (Cu)
Hint: The connection of different types of conductors and/or different cross-sections at one clamping unit is not permitted.
f[1] = flexible with end ferrule

Type of terminal	Fixed in cable junction boxes	Clamping units per pole	Rated connecting capacity mm² and types of conductors	Conductors to be connected per pole	Tightening torque	Current carrying capacity	Rated cross section of terminal
 **DKL 04**	**DP 9025, DP 9221, DP 9222, DE 9325, DE 9326, DE 9345, DE 9346**	1	6 sol 4 sol 2.5 sol 1.5 sol	1-2 1-3 1-4 1-6	1.2 Nm	–	**6 mm²**
 **KLS 51**	**K 7055**	2	50 s 35 s 25 s 16 s	1-4 1-4 1-4 1-6	12 Nm	150 A	**50 mm²**
 **4 x KLS 54**	**K 7004**	4	70 s 50 s 35 s 25 s 16 s	1-4 1-4 1-4 1-4 1-4	10 Nm	216 A	**70 mm²**
 **5 x KLS 55**	**K 7005**	4	70 s 50 s 35 s 25 s 16 s	1-4 1-4 1-4 1-4 1-4	10 Nm	216 A	**70 mm²**
	**DK 2524 S** **DK 3525 S**	Incoming 2 Outgoing 4	25 r 16 r	1-2 1-4	3 Nm	80 A	**25 mm²**
	**DK 3534 S** **DK 5035 S**	Incoming 2 Outgoing 4	35 r 35 r	1-2 1-4	4 Nm 3 Nm	100 A	**35 mm²**
	**Terminal for equipotential bonding:** **DP 9026** for 1 continued conductor 4-25 mm² and 5 conductors 4-10 mm² (16 mm² sol)						

Terminals

	K 7042 / K 7052	K 1204 / K 1205		K 2404 / K 2405	
Rated connecting capacity	95 mm²	150 mm²		240 mm²	
Current carrying capacity	160 A	250 A		400 A	
Tightening torque	20 Nm	20 Nm		40 Nm	
Clamping units per pole	2	2	4	2	4
					
Conductor cross section Cu/Alu[1] sol (round)	10-50	16-50	16-50	25-50	25-50
Conductor cross section Cu/Alu[1] s (round), f (flexible)	16-95	16-150	16-70	25-240	25-120
Conductor cross section Cu/Alu[1] sol (sector)	50-95	50-150	50-70	50-185	50-120
Conductor cross section Cu s (sector)	35-95	35-150	35-70	35-240	35-120
Conductor cross section Alu[1] s (sector)	35-70	50-120	35-50	95-185	50-95

1) Before connecting, aluminum conductors must be pre-treated according to the appropriate technical recommendations. The connections must be checked at regular intervals and maintained after 6 months at the latest.

FIXCONNECT® technology

Type	Clamping units per pole	Rated connecting capacity per types of conductors		Current carrying capacity
		r (rigid)	f (flexible)	
DPC 9225	4	1.5 - 4 mm²	1.5 - 4 mm² *)	32 A
KC 9045	4	1.5 - 4 mm²	1.5 - 4 mm² *)	32 A
KC 9255	4	2.5 - 10 mm²	2.5 - 10 mm²	57 A
KC 9355	4	2.5 - 16 mm²	2.5 - 16 mm²	76 A

*) Without ferrule; clamping unit needs to be opened with a screwdriver when conductor is inserted.

DK Cable junction boxes

Technical details
Operating and ambient conditions

	Boxes with terminals		Removable grommets	Boxes with terminals
	D ..., DP ..., DPC ..., DE ..., KC ..., K ..., RK ..., DN ...	**K 7055 K 7004/5 K 9951 K 1204/5 K 2404/5 K 2401 Mi FM ..**	**EKA 20, ERA 20, DPS 02**	**KF .... G KF .... B**
Application area	Suitable for indoor installation and outdoor installation, protected against weather influences			Suitable for for **outdoor installation** (harsh environment and/or outdoor). To reduce the formation and accumulation of condensed water see technical information.
Resistant to occasional cleaning procedures				**Resistance to occasional cleaning procedures (direct jet)** with high-pressure cleaner without cleaning additives, water pressure: max 100 bar, water temperature: max 80 °C, distance ≥ 0.15 m, in accordance with DIN EN 60529:2014-09 (IEC 60529:2013) = IP 69. **Box and cable entries at least IP 66.**
Ambient temperature				
- Average value over 24 hours	+ 35 °C	+ 35 °C	+ 35 °C	+ 55 °C
- Maximum value	+ 40 °C	+ 40 °C	+ 40 °C	+ 70 °C
- Minimum value	– 25 °C	– 25 °C	– 25 °C	– 25 °C
Relative humidity	50% at 40 °C	50% at 40 °C	–	50% at 40 °C
- short-time	100% at 25 °C	100% at 25 °C	–	100% at 25 °C
Fire protection in the event of internal faults	Demands placed on electrical devices from standards and laws: Minimum requirements - Glow wire test in accordance with IEC 60695-2-11: - 650 °C for boxes and cable glands - 850 °C for conducting components			
Burning behaviour				
- Glow wire test IEC 60695-2-11	750 °C	960 °C	750 °C	960 °C
- UL Subject 94	V-2 flame-retardant self-extinguishing	V-2 flame-retardant self-extinguishing	– flame-retardant self-extinguishing	V-0 flame-retardant self-extinguishing
Degree of protection against mechanical load	IK07 (2 Joule)	IK08 (5 Joule)	–	IK09 (10 Joule)
Toxic behaviour	halogen-free silicone-free	halogen-free silicone-free	halogen-free silicone-free	halogen-free silicone-free
	”Halogen-free” in accordance with IEC 60754-2 ”Common test methods for cables - Determination of the amount of halogen acid gas”. **For material properties see technical data.**			

DK Cable junction boxes

Technical details
Operating and ambient conditions

	Empty boxes	Removable grommets		Empty boxes
	DK ..., DP ..., DE ...	**EKA 20, ERA 20, DPS 02**	**LDM ...**	**KF .... G, KF .... B KF .... H, KF .... C**
Application area	Suitable for indoor installation and outdoor installation, protected against weather influences			Suitable for for **outdoor installation** (harsh environment and/or outdoor). To reduce the formation and accumulation of condensed water see technical information.
Resistant to occasional cleaning procedures				**Resistance to occasional cleaning procedures (direct jet)** with high-pressure cleaner without cleaning additives, water pressure: max 100 bar, water temperature: max 80 °C, distance ≥ 0.15 m, in accordance with DIN EN 60529:2014-09 (IEC 60529:2013) = IP 69. **Box and cable entries at least IP 66.**
Ambient temperature				
- Average value over 24 hours	–	+ 35 °C	+ 55 °C	+ 55 °C
- Maximum value	+ 40 °C	+ 60 °C	+ 70 °C	+ 70 °C
- Minimum value	– 25 °C	– 25 °C	– 25 °C	– 25 °C
Fire protection in the event of internal faults	Demands placed on electrical devices from standards and laws: Minimum requirements - Glow wire test in accordance with IEC 60695-2-11: - 650 °C for boxes and cable glands - 850 °C for conducting components			
Burning behaviour				
- Glow wire test IEC 60695-2-11	750 °C	750 °C	750 °C	960 °C
- UL Subject 94	V-2 flame-retardant self-extinguishing	– flame-retardant self-extinguishing	– flame-retardant self-extinguishing	V-0 flame-retardant self-extinguishing
Degree of protection against mechanical load	IK07 (2 Joule)	–	–	IK09 (10 Joule)
Toxic behaviour	halogen-free silicone-free	halogen-free silicone-free	halogen-free silicone-free	halogen-free silicone-free

”Halogen-free” in accordance with IEC 60754-2 ”Common test methods for cables - Determination of the amount of halogen acid gas”.

For material properties see technical data.

ENYCASE®

DK Cable junction boxes

Technical details
Operating and ambient conditions

	Boxes with terminals
	WP .... G, WP ... B
Application area	Suitable for **outdoor installation** (harsh environment and/or outdoor). For application in ambient conditions with formation of condensation and ingress of water as well as for installation in the ground without traffic loads in accordance with DIN VDE V 0606-22-100.
Resistant to occasional cleaning procedures	**Resistant to cleaning procedures (direct jet)** **max. with high-pressure cleaner without additives, water temperature: max. 80° C**
Ambient temperature - Average value over 24 hours - Maximum value - Minimum value	 + 55 °C + 70 °C – 25 °C
Relative humidity	100%
Burning behaviour - Glow wire test IEC 60695-2-11 - UL Subject 94	 960° C V-0 flame-retardant self-extinguishing
Degree of protection against mechanical load	IK08 (5 Joule)
Toxic behaviour	halogen-free silicone-free

Hensel cable junction boxes and cable entry systems comply with the following standards and requirements:

1. Cable junction boxes

- IEC 60670-22
Particular requirements for connecting boxes and enclosures
Part 22: Particular requirements for connecting boxes

- IEC 60998
Connecting devices for low voltage circuits for household and similar purposes
Part 2-1: Particular requirements for connecting devices as separate entities with screw-type terminals
Part 2-2: Particular requirements for connecting devices as separate entities with screwless-type terminals

- IEC 60999
EN 60999
Connecting devices
Safety requirements for screw-type and screwless-type clamping units for electrical copper conductors

- DIN VDE V 0606-22-100 (German standard)
Enclosures for encapsulation with connection terminals (GVV)

2. Cable junction boxes with terminal blocks

- IEC 60670-22
Particular requirements for connecting boxes and enclosures

- EN 60947-7-1
Low-voltage switchgear and controlgear,
Part 7: Auxiliary equipment;
Section 1 - Terminal blocks for copper conductors

3. Conduit entries (ERA 20)

- EN 60423
Conduits for electrical pursposes - Outside diameters of conduits for electrical installations and threads for conduits and fittings

4. Degrees of protection

- IEC 60529
DIN VDE 0470 Part 1 (German standard)
Degree of protection by enclosure (IP Code)

5. Halogen-free

- EN 50267
Examination of cables and insulated wires
halogen-free materials

ENYCASE®

DK Cable junction boxes

Technical details
Cable junction boxes tested for intrinsic fire resistance

Junction box with connected cables after testing.

Test temperature curve in accordance with DIN 4102

Safety circuits must remain operational for a sufficient period in accordance with the national regulations governing fire protection requirements for cable installations during exposure to fire.

This ensures that electrotechnical equipment such as luminaires, lifts, smoke outlets, alarm systems etc. are supplied with power for 30 or 90 minutes and thereby enable people to leave the building and assist rescue teams in carrying out their work.

When planning and implementing these cable installations, the current specimen regulation for fire protection requirements in these installations must be observed.

FK Cable junction boxes comply with these requirements when used together with type-approved cables as well as suitable cable clamps or mounting devices.

- Cable junction boxes tested for intrinsic fire restistance.
- Degree of protection IP 65, IP 66
- Box made from sheet steel with powder coating or PC-GFS thermoplastics, pastel orange RAL 2003
- No additional fire load, no toxic or corrosive emissions
- Intrinsic fire resistance according to DIN 4102 part 12 (German standard) in connection with function-retaining cables of 0.5-16 mm²
- Protection against direct contact also maintained due to the box
- Captive cover with 4 screw fixings

Box fixing with anchors:

Anchor (building materials)	**Fischer type ...**					**Hilti type ...**		
	FIS V..	**FNA..**	**FBS..**	**FBN..**	**FHY..**	**HUS..**	**HSA..**	**HIT-HY..**
Limestone blocks KS 12	x					x		x
Building bricks Mz 12	x					x		x
Airbricks HLz 12	x							x
Limestone air blocks KSL 12	x							x
Prestressed concrete slabs					x			
Porous concrete slabs => 3.3						x		x
Porous concrete blocks => 4						x		x
Concrete => B25 / =< B55		x	x	x		x	x	

Please observe the current approvals and notes from the manufacturer of the anchors.

DK Cable junction boxes

Technical details
Cable junction boxes tested for intrinsic fire resistance

Ambient conditions in working operation:

Type	FK 04xx, FK 06xx, FK 16xx	FK 5000, FK 6505, FK 9xx5	FK 9259
Application area	Suitable for indoor installation (normal environment and/or protected outdoor)		
Ambient temperature - Average value over 24 hours - Maximum value - Minimum value	 + 35 °C + 40 °C – 25 °C	 + 35 °C + 40 °C – 25 °C	 + 35 °C + 40 °C – 5 °C
Relative humidity - short-time	50 % at 40 °C 100 % at 25 °C	50 % at 40 °C 100 % at 25 °C	50 % at 40 °C 100 % at 25 °C
Material	PC (polycarbonate) halogen-free	sheet steel, powder-coated halogen-free	
Degree of protection against mechanical load	IK09 (10 Joule)	IK10 (20 Joule)	

Standards and regulations:

- IEC 60998-1, DIN EN 60998 Teil 1
Connecting devices for low-voltage circuits for household and similar purpose
Part 1: General requirements

- IEC 60998-2-1, DIN EN 60998 Teil 2-1
Connecting devises for low-voltage circuits for household and similar purposes.
Part 2-1. Particular requirements for connecting devices as separate entities with screw-type terminals

- IEC 60670-22
Particular requirements for connecting boxes and enclosures

- IEC 60529, DIN VDE 0470 Teil 1 (German standard)
Degrees of protection provided by enclosures (IP Code)

- EN 60947-7-1
Low-voltage switchgear and controlgear -
Part 7-1: Auxiiary equipment - Terminal blocks for copper conductors

- DIN EN 50262
Metric cable glands for electrical installations

- DIN 4102 Part 12 (German standard)
Fire behaviour of building materials and structural elements) -
Part 12 - Intrinsic fire resistance of electric cable systems; requirements and tests

- EN 50200
Method of test for resistance to fire of unprotected small cables for use in emergency circuits.


HENSEL

KV Small-type distribution boards up to 63 A

- **3 to 54 modules**
- **degree of protection IP 54-65**
- **protection class II, ⧈**
- **in accordance with IEC 60670-24 / DIN 43871**
- **colour grey, RAL 7035**

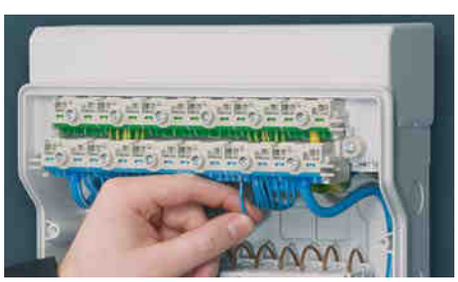
Circuit breaker boxes - cable entry via integrated elastic membranes	144 - 166
Circuit breaker boxes - cable entry via metric knockouts	167 - 185
Circuit breaker boxes - “weatherproof”, for outdoor installation	186 - 191
Circuit breaker boxes - conduit entry via integrated elastic membranes	192 - 195
Circuit breaker boxes with additional space for electrical devices not to be manually actuated	
- cable entry via integrated elastic membranes	196 - 199
- cable entry via metric knockouts	200 - 203
Circuit breaker boxes - with flanges for individual drilling of cable entries	204 - 206
Empty boxes	207 - 208
KWH Meter boxes	209 - 210
Accessories	211 - 215
Technical details	216 - 223

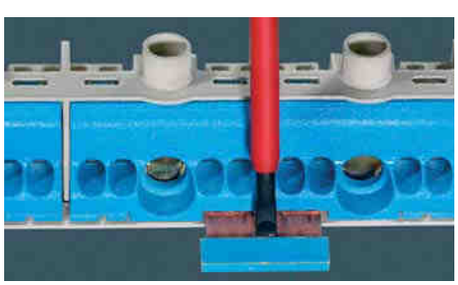
Further technical information can be found on the Internet
www.hensel-electric.de -> Products

KV small-type distribution boards

Circuit breaker box

Cable entry via integrated elastic membranes





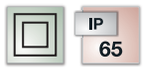
- Compact user friendly solution, optically optimized by cable entry cover
- Integrated compartment for accessories - everything has its proper place
- DIN-rails with stopper for proper position of installation device
- Screws made of stainless steel V2A
- FIXCONNECT® plug-in terminal technology for PE and N
- Connection for copper conductors
- KV Small-type distribution boards with up to four disconnectable N-potentials in one bar enable the installation of RCDs without additional efforts or accessories
- 12 to 54 modules: attached blanking strips for DIN rail equipment openings
- 3 to 9 modules: protective cover can be cut out
- Material: polystyrene
- Burning behaviour: glow wire test in accordance with IEC 60695-2-11: 750 °C, flame-retardant, self-extinguishing
- Colour: grey, RAL 7035

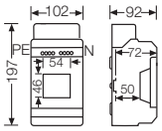
KV small-type distribution boards

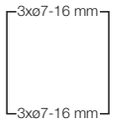
Circuit breaker boxes
Cable entry via integrated elastic membranes

KV 9103

3 modules: 1 x 3 x 18 mm





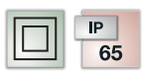


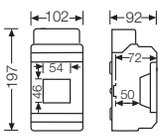
- 1-row
- per PE/N number x cross section 1 x 25 mm², 4 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out
- cable entry via integrated elastic membranes

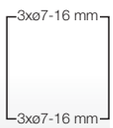
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =10 watts according to EN 60670-24

KV 8103

3 modules: 1 x 3 x 18 mm
without PE and N terminal





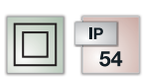


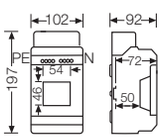
- 1-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out
- cable entry via integrated elastic membranes

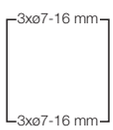
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =10 watts according to EN 60670-24

KV 1503

3 modules: 1 x 3 x 18 mm







- 1-row
- per PE/N number x cross section 1 x 25 mm², 4 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out
- cable entry via integrated elastic membranes

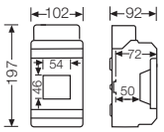
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =10 watts according to EN 60670-24

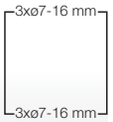
3 to 9 modules: protective cover can be cut out

British Standard installation with earthed armoured cables

KV 1603

3 modules: 1 x 3 x 18 mm
without PE and N terminal





- 1-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out
- cable entry via integrated elastic membranes

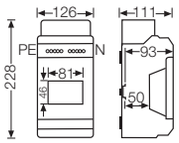
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =10 watts according to EN 60670-24

KV small-type distribution boards

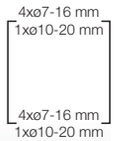
Circuit breaker boxes
Cable entry via integrated elastic membranes

KV 9104

4.5 modules: 1 x 4.5 x 18 mm



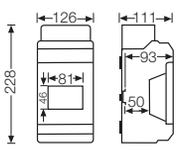
- 1-row
- per PE/N number x cross section 2 x 25 mm², 4 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out
- cable entry via integrated elastic membranes



rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =12 watts according to EN 60670-24

KV 8104

4.5 modules: 1 x 4.5 x 18 mm without PE and N terminal

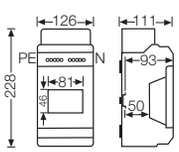


- 1-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out
- cable entry via integrated elastic membranes

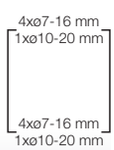
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =12 watts according to EN 60670-24

KV 1504

4.5 modules: 1 x 4.5 x 18 mm



- 1-row
- per PE/N number x cross section 2 x 25 mm², 4 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out
- cable entry via integrated elastic membranes



rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =12 watts according to EN 60670-24

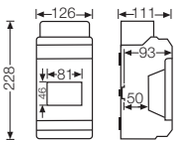
3 to 9 modules: protective cover can be cut out

British Standard installation with earthed armoured cables

KV 1604

4.5 modules: 1 x 4.5 x 18 mm
without PE and N terminal

- 1-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out
- cable entry via integrated elastic membranes

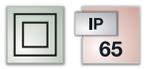


rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =12 watts according to EN 60670-24

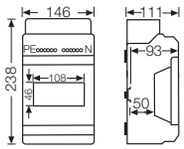
KV small-type distribution boards
Circuit breaker boxes
Cable entry via integrated elastic membranes

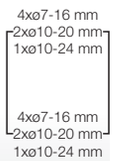
KV 9106

6 modules: 1 x 6 x 18 mm



- 1-row
- per PE/N number x cross section 2 x 25 mm², 4 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out
- cable entry via integrated elastic membranes



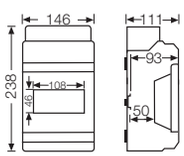


rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =13 watts according to EN 60670-24

KV 8106

6 modules: 1 x 6 x 18 mm without PE and N terminal

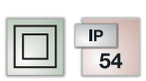
- 1-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out
- cable entry via integrated elastic membranes



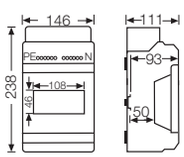
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =13 watts according to EN 60670-24

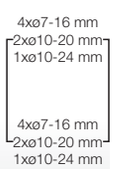
KV 1506

6 modules: 1 x 6 x 18 mm



- 1-row
- per PE/N number x cross section 2 x 25 mm², 4 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out
- cable entry via integrated elastic membranes





rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =13 watts according to EN 60670-24

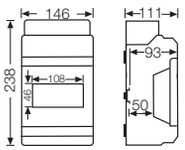
3 to 9 modules: protective cover can be cut out

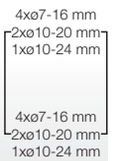
British Standard installation with earthed armoured cables

KV 1606

6 modules: 1 x 6 x 18 mm
without PE and N terminal

- 1-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out
- cable entry via integrated elastic membranes





rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =13 watts according to EN 60670-24

KV small-type distribution boards

Circuit breaker boxes
Cable entry via integrated elastic membranes

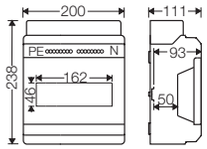
KV 9109

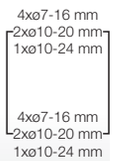
9 modules: 1 x 9 x 18 mm

- 1-row
- per PE/N number x cross section 2 x 25 mm², 8 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out
- cable entry via integrated elastic membranes

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =16 watts according to EN 60670-24

IP 65





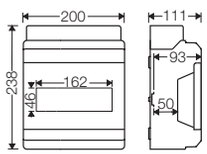
KV 8109

9 modules: 1 x 9 x 18 mm without PE and N terminal

- 1-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out
- cable entry via integrated elastic membranes

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =16 watts according to EN 60670-24

IP 65



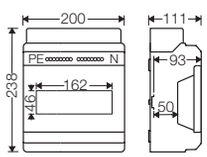
KV 1509

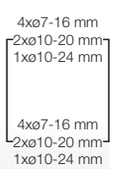
9 modules: 1 x 9 x 18 mm

- 1-row
- per PE/N number x cross section 2 x 25 mm², 8 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out
- cable entry via integrated elastic membranes

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =16 watts according to EN 60670-24

IP 54





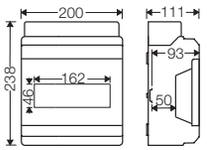
3 to 9 modules: protective cover can be cut out

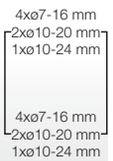
British Standard installation with earthed armoured cables

KV 1609

9 modules: 1 x 9 x 18 mm
without PE and N terminal

- 1-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out
- cable entry via integrated elastic membranes





rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =16 watts according to EN 60670-24

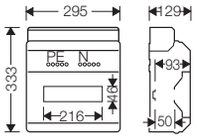
KV small-type distribution boards
Circuit breaker boxes
Cable entry via integrated elastic membranes

KV 9112

12 modules: 1 x 12 x 18 mm

- 1-row
- per PE/N number x cross section 3 x 25 mm², 12 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, for up to 2 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =26 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 21 watts at 30 K according to DIN 43871

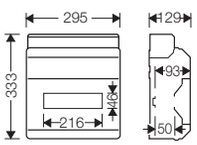


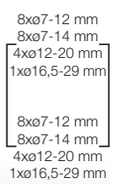
KV 8112

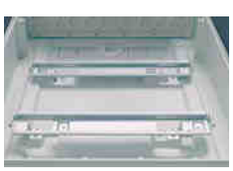
12 modules: 1 x 12 x 18 mm without PE and N terminal

- 1-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =26 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 21 watts at 30 K according to DIN 43871





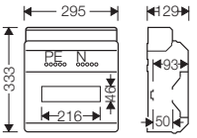


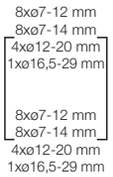
Variable installation depth by mounting DIN-rails in different levels

Included blanking strips

KV 1512

12 modules: 1 x 12 x 18 mm



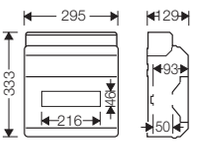


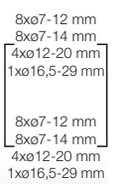
- 1-row
- per PE/N number x cross section 3 x 25 mm², 12 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, for up to 2 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =26 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 21 watts at 30 K according to DIN 43871

KV 1612

12 modules: 1 x 12 x 18 mm without PE and N terminal





- 1-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes

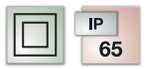
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =26 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 21 watts at 30 K according to DIN 43871

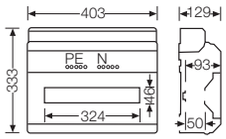
KV small-type distribution boards

Circuit breaker boxes
Cable entry via integrated elastic membranes

KV 9118

18 modules: 1 x 18 x 18 mm



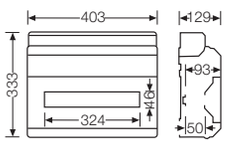


- 1-row
- per PE/N number x cross section 4 x 25 mm², 16 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, for up to 2 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =33 watts according to EN 60670-24

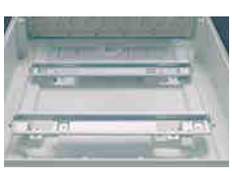
KV 8118

18 modules: 1 x 18 x 18 mm without PE and N terminal



- 1-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =33 watts according to EN 60670-24

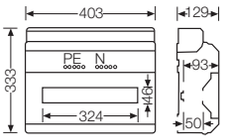


Variable installation depth by mounting DIN-rails in different levels

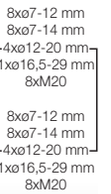
Included blanking strips

KV 1518

18 modules: 1 x 18 x 18 mm



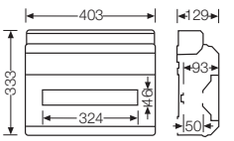
- 1-row
- per PE/N number x cross section 4 x 25 mm², 16 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, for up to 2 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes



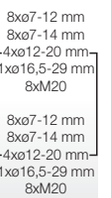
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =33 watts according to EN 60670-24

KV 1618

18 modules: 1 x 18 x 18 mm without PE and N terminal



- 1-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes



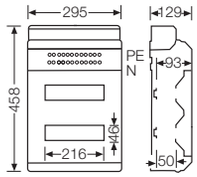
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =33 watts according to EN 60670-24

KV small-type distribution boards

Circuit breaker boxes
Cable entry via integrated elastic membranes

KV 9224

24 modules: 2 x 12 x 18 mm

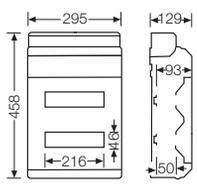


- 2-row
- per PE/N number x cross section 6 x 25 mm², 24 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =31 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 25 watts at 30 K according to DIN 43871

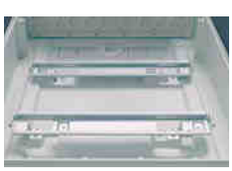
KV 8224

24 modules: 2 x 12 x 18 mm without PE and N terminal



- 2-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =31 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 25 watts at 30 K according to DIN 43871

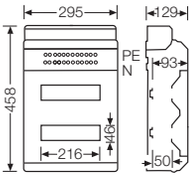


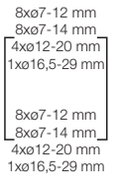
Variable installation depth by mounting DIN-rails in different levels

Included blanking strips

KV 2524

24 modules: 2 x 12 x 18 mm



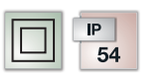


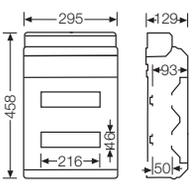
- 2-row
- per PE/N number x cross section 6 x 25 mm², 24 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes

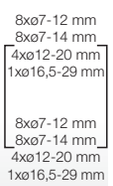
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =31 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 25 watts at 30 K according to DIN 43871

KV 2624

24 modules: 2 x 12 x 18 mm without PE and N terminal







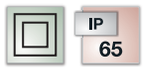
- 2-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =31 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 25 watts at 30 K according to DIN 43871

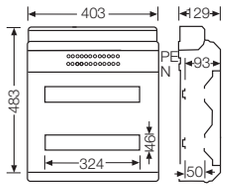
KV small-type distribution boards
Circuit breaker boxes
Cable entry via integrated elastic membranes

KV 9236

36 modules: 2 x 18 x 18 mm



- 2-row
- per PE/N number x cross section 8 x 25 mm², 32 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes



8xø7-12 mm
8xø7-14 mm
4xø12-20 mm
1xø16,5-29 mm
8xM20

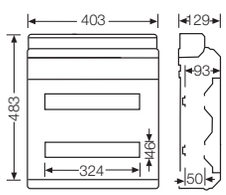
8xø7-12 mm
8xø7-14 mm
4xø12-20 mm
1xø16,5-29 mm
8xM20

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =38 watts according to EN 60670-24

KV 8236

36 modules: 2 x 18 x 18 mm without PE and N terminal

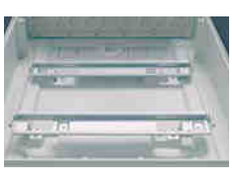
- 2-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes



8xø7-12 mm
8xø7-14 mm
4xø12-20 mm
1xø16,5-29 mm
8xM20

8xø7-12 mm
8xø7-14 mm
4xø12-20 mm
1xø16,5-29 mm
8xM20

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =38 watts according to EN 60670-24



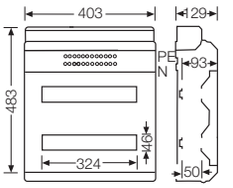
Variable installation depth by mounting DIN-rails in different levels

Included blanking strips

KV 2536

36 modules: 2 x 18 x 18 mm

IP 54



- 2-row
- per PE/N number x cross section 8 x 25 mm², 32 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =38 watts according to EN 60670-24

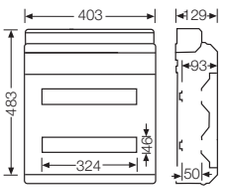
8xø7-12 mm
8xø7-14 mm
4xø12-20 mm
1xø16,5-29 mm
8xM20

8xø7-12 mm
8xø7-14 mm
4xø12-20 mm
1xø16,5-29 mm
8xM20

KV 2636

36 modules: 2 x 18 x 18 mm without PE and N terminal

IP 54



- 2-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =38 watts according to EN 60670-24

8xø7-12 mm
8xø7-14 mm
4xø12-20 mm
1xø16,5-29 mm
8xM20

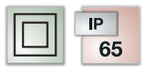
8xø7-12 mm
8xø7-14 mm
4xø12-20 mm
1xø16,5-29 mm
8xM20

KV small-type distribution boards

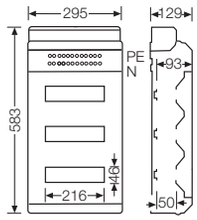
Circuit breaker boxes
Cable entry via integrated elastic membranes

KV 9336

36 modules: 3 x 12 x 18 mm



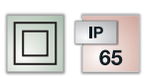
- 3-row
- per PE/N number x cross section 6 x 25 mm², 24 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes



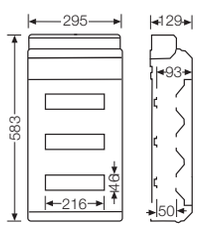
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =35 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 28 watts at 30 K according to DIN 43871

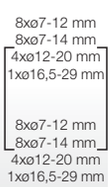
KV 8336

36 modules: 3 x 12 x 18 mm without PE and N terminal

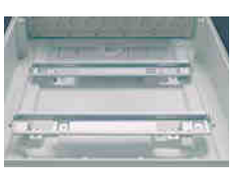


- 3-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes





rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =35 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 28 watts at 30 K according to DIN 43871

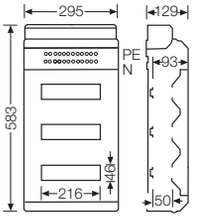


Variable installation depth by mounting DIN-rails in different levels

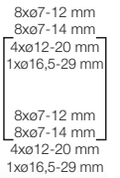
Included blanking strips

KV 3536

36 modules: 3 x 12 x 18 mm



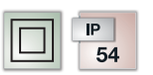
- 3-row
- per PE/N number x cross section 6 x 25 mm², 24 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes

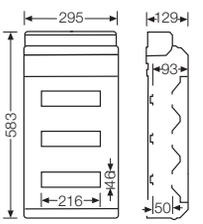


rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =35 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 28 watts at 30 K according to DIN 43871

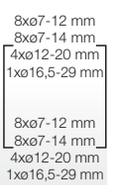
KV 3636

36 modules: 3 x 12 x 18 mm without PE and N terminal





- 3-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes



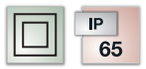
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =35 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 28 watts at 30 K according to DIN 43871

KV small-type distribution boards

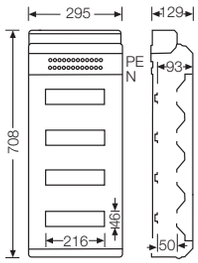
Circuit breaker boxes
Cable entry via integrated elastic membranes

KV 9448

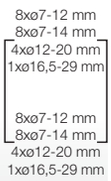
48 modules: 4 x 12 x 18 mm



- 4-row
- per PE/N number x cross section 6 x 25 mm², 24 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes



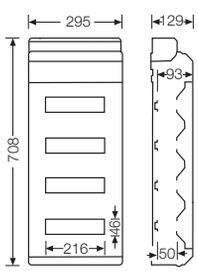
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =43 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 34 watts at 30 K according to DIN 43871



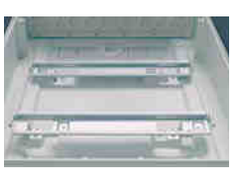
KV 8448

48 modules: 4 x 12 x 18 mm without PE and N terminal

- 4-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes



rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =43 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 34 watts at 30 K according to DIN 43871



Variable installation depth by mounting DIN-rails in different levels

Included blanking strips

KV small-type distribution boards

Circuit breaker boxes
Cable entry via integrated elastic membranes

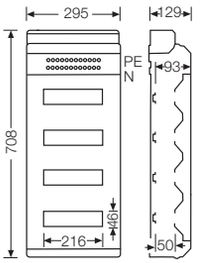
KV 4548

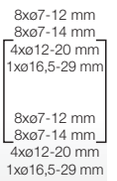
48 modules: 4 x 12 x 18 mm

- 4-row
- per PE/N number x cross section 6 x 25 mm², 24 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =43 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 34 watts at 30 K according to DIN 43871

IP 54





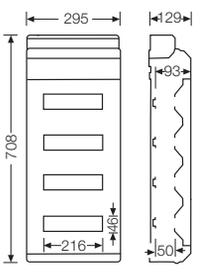
KV 4648

48 modules: 4 x 12 x 18 mm without PE and N terminal

- 4-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =43 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 34 watts at 30 K according to DIN 43871

IP 54

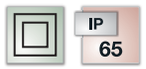


KV small-type distribution boards

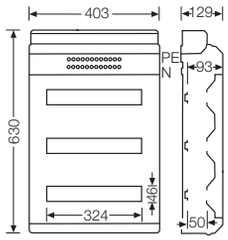
Circuit breaker boxes
Cable entry via integrated elastic membranes

KV 9354

54 modules: 3 x 18 x 18 mm



- 3-row
- per PE/N number x cross section 8 x 25 mm², 32 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes



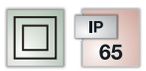
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =50 watts according to EN 60670-24

8xø7-12 mm
8xø7-14 mm
4xø12-20 mm
1xø16,5-29 mm
8xM20

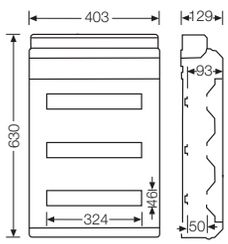
8xø7-12 mm
8xø7-14 mm
4xø12-20 mm
1xø16,5-29 mm
8xM20

KV 8354

54 modules: 3 x 18 x 18 mm without PE and N terminal



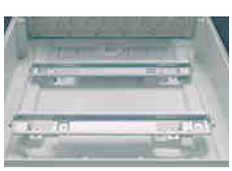
- 3-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes



rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =50 watts according to EN 60670-24

8xø7-12 mm
8xø7-14 mm
4xø12-20 mm
1xø16,5-29 mm
8xM20

8xø7-12 mm
8xø7-14 mm
4xø12-20 mm
1xø16,5-29 mm
8xM20



Variable installation depth by mounting DIN-rails in different levels

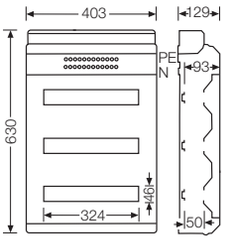
Included blanking strips

KV 3554

54 modules: 3 x 18 x 18 mm

- 3-row
- per PE/N number x cross section 8 x 25 mm², 32 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =50 watts according to EN 60670-24



8xø7-12 mm
8xø7-14 mm
4xø12-20 mm
1xø16,5-29 mm
8xM20

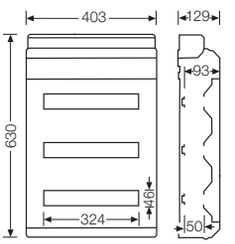
8xø7-12 mm
8xø7-14 mm
4xø12-20 mm
1xø16,5-29 mm
8xM20

KV 3654

54 modules: 3 x 18 x 18 mm without PE and N terminal

- 3-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =50 watts according to EN 60670-24



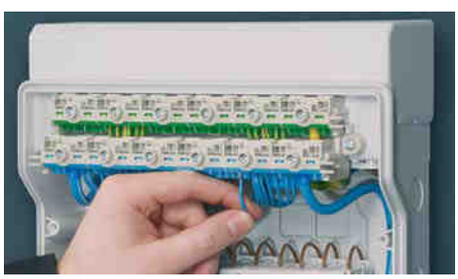
8xø7-12 mm
8xø7-14 mm
4xø12-20 mm
1xø16,5-29 mm
8xM20

8xø7-12 mm
8xø7-14 mm
4xø12-20 mm
1xø16,5-29 mm
8xM20

KV small-type distribution boards

Circuit breaker box

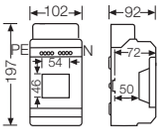
Cable entry via metric knockouts

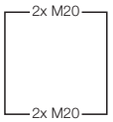


- Compact user friendly solution, optically optimized by cable entry cover
- Integrated compartment for accessories - everything has its proper place
- DIN-rails with stopper for proper position of installation device
- Screws made of stainless steel V2A
- FIXCONNECT® plug-in terminal technology for PE and N
- Connection for copper conductors
- KV Small-type distribution boards with up to four disconnectable N-potentials in one bar enable the installation of RCDs without additional efforts or accessories
- 12 to 54 modules: attached blanking strips for DIN rail equipment openings
- Material: polystyrene
- Burning behaviour: glow wire test in accordance with IEC 60695-2-11: 750 °C, flame-retardant, self-extinguishing
- Colour: grey, RAL 7035

KV 7103

3 modules: 1 x 3 x 18 mm



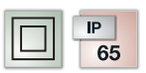


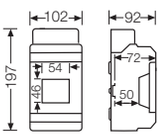
- 1-row
- knockouts: top and bottom walls 2x M20 each
- per PE/N number x cross section 1 x 25 mm², 4 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out

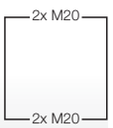
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =10 watts according to EN 60670-24

KV 6103

3 modules: 1 x 3 x 18 mm
without PE and N terminal







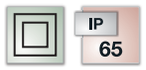
- 1-row
- knockouts: top and bottom walls 2x M20 each
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out

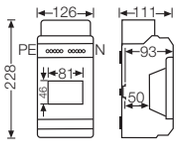
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =10 watts according to EN 60670-24

KV small-type distribution boards
Circuit breaker boxes
Cable entry via metric knockouts

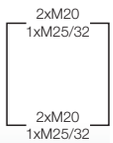
KV 7104

4.5 modules: 1 x 4.5 x 18 mm





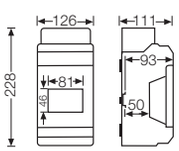
- 1-row
- knockouts: top and bottom walls 2x M20 and 1x M25/32 each
- per PE/N number x cross section 2 x 25 mm², 4 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out



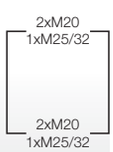
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =12 watts according to EN 60670-24

KV 6104

4.5 modules: 1 x 4.5 x 18 mm
without PE and N terminal



- 1-row
- knockouts: top and bottom walls 2x M20 and 1x M25/32 each
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out



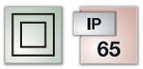
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =12 watts according to EN 60670-24

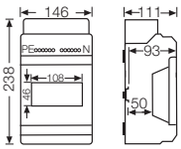
3 to 9 modules: protective cover can be cut out

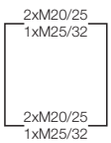
British Standard installation with earthed armoured cables

KV 7106

6 modules: 1 x 6 x 18 mm





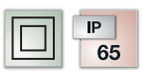


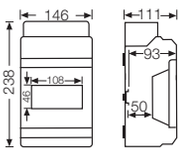
- 1-row
- knockouts: top and bottom walls 2x M20/25 and 1x M25/32 each
- per PE/N number x cross section 2 x 25 mm², 4 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =13 watts according to EN 60670-24

KV 6106

6 modules: 1 x 6 x 18 mm
without PE and N terminal





- 1-row
- knockouts: top and bottom walls 2x M20/25 and 1x M25/32 each
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out

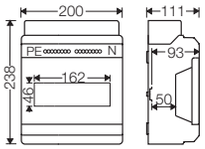
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =13 watts according to EN 60670-24

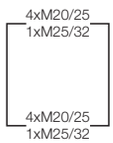
KV small-type distribution boards
Circuit breaker boxes
Cable entry via metric knockouts

KV 7109

9 modules: 1 x 9 x 18 mm

IP 65





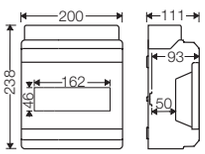
- 1-row
- knockouts: top and bottom walls 4x M20/25 and 1x M25/32 each
- per PE/N number x cross section 2 x 25 mm², 8 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out

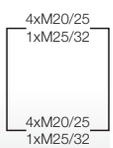
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =16 watts according to EN 60670-24

KV 6109

9 modules: 1 x 9 x 18 mm without PE and N terminal

IP 65





- 1-row
- knockouts: top and bottom walls 4x M20/25 and 1x M25/32 each
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out

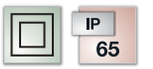
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =16 watts according to EN 60670-24

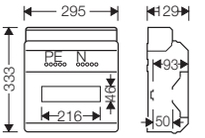
3 to 9 modules: protective cover can be cut out

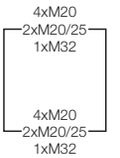
British Standard installation with earthed armoured cables

KV 9112 M

12 modules: 1 x 12 x 18 mm





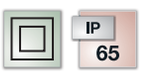


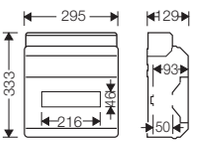
- 1-row
- per PE/N number x cross section 3 x 25 mm², 12 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, for up to 2 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings

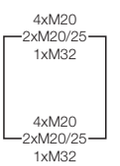
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =26 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 21 watts at 30 K according to DIN 43871

KV 8112 M

12 modules: 1 x 12 x 18 mm without PE and N terminal







- 1-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 4x M20, 2x M20/25 and 1x M32 each

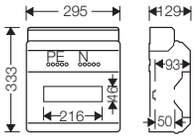
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =26 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 21 watts at 30 K according to DIN 43871

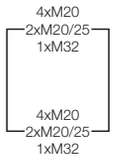
KV small-type distribution boards

Circuit breaker boxes
Cable entry via metric knockouts

KV 1512 M

12 modules: 1 x 12 x 18 mm



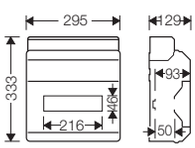


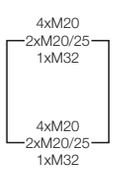
- 1-row
- per PE/N number x cross section 3 x 25 mm², 12 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, for up to 2 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 4x M20, 2x M20/25 and 1x M32 each

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =26 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 21 watts at 30 K according to DIN 43871

KV 1612 M

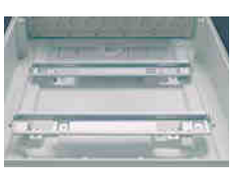
12 modules: 1 x 12 x 18 mm without PE and N terminal





- 1-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 4x M20, 2x M20/25 and 1x M32 each

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =26 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 21 watts at 30 K according to DIN 43871

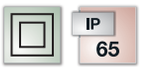


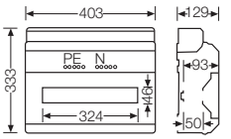
Variable installation depth by mounting DIN-rails in different levels

Included blanking strips

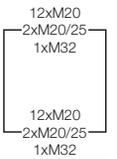
KV 9118 M

18 modules: 1 x 18 x 18 mm





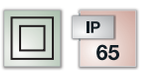
- 1-row
- per PE/N number x cross section 4 x 25 mm², 16 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, for up to 2 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings

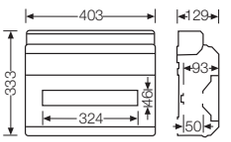


rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =33 watts according to EN 60670-24

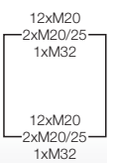
KV 8118 M

18 modules: 1 x 18 x 18 mm without PE and N terminal





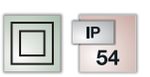
- 1-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 12x M20, 2x M20/25 and 1x M32 each

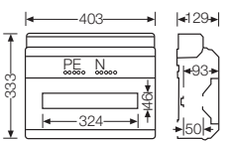


rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =33 watts according to EN 60670-24

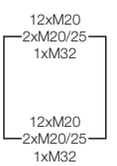
KV 1518 M

18 modules: 1 x 18 x 18 mm





- 1-row
- per PE/N number x cross section 4 x 25 mm², 16 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, for up to 2 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 12x M20, 2x M20/25 and 1x M32 each



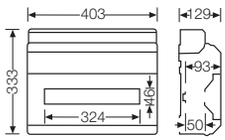
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =33 watts according to EN 60670-24

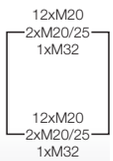
KV small-type distribution boards
Circuit breaker boxes
Cable entry via metric knockouts

KV 1618 M

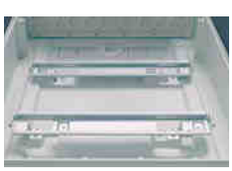
18 modules: 1 x 18 x 18 mm
without PE and N terminal

- 1-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 12x M20, 2x M20/25 and 1x M32 each





rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =33 watts according to EN 60670-24

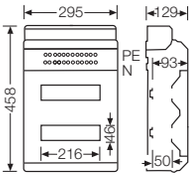


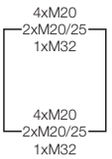
Variable installation depth by mounting DIN-rails in different levels

Included blanking strips

KV 9224 M

24 modules: 2 x 12 x 18 mm



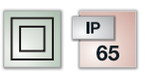


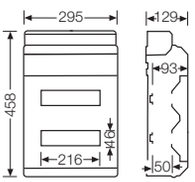
- 2-row
- per PE/N number x cross section 6 x 25 mm², 24 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings

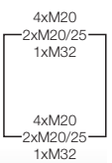
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =31 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 25 watts at 30 K according to DIN 43871

KV 8224 M

24 modules: 2 x 12 x 18 mm without PE and N terminal







- 2-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 4x M20, 2x M20/25 and 1x M32 each

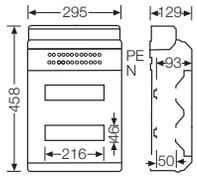
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =31 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 25 watts at 30 K according to DIN 43871

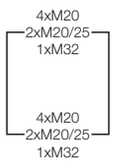
KV small-type distribution boards

Circuit breaker boxes
Cable entry via metric knockouts

KV 2524 M

24 modules: 2 x 12 x 18 mm



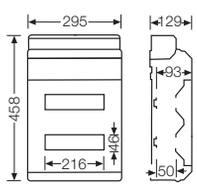


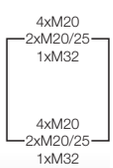
- 2-row
- per PE/N number x cross section 6 x 25 mm², 24 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 4x M20, 2x M20/25 and 1x M32 each

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =31 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 25 watts at 30 K according to DIN 43871

KV 2624 M

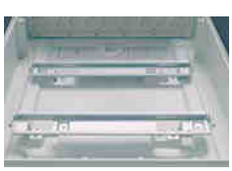
24 modules: 2 x 12 x 18 mm without PE and N terminal





- 2-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 4x M20, 2x M20/25 and 1x M32 each

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =31 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 25 watts at 30 K according to DIN 43871



Variable installation depth by mounting DIN-rails in different levels

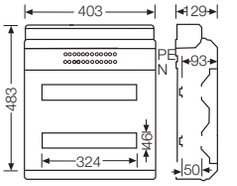
Included blanking strips

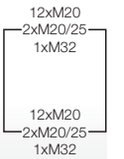
KV 9236 M

36 modules: 2 x 18 x 18 mm

- 2-row
- per PE/N number x cross section 8 x 25 mm², 32 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =38 watts according to EN 60670-24



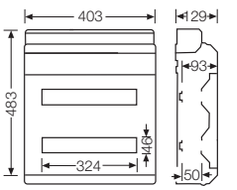


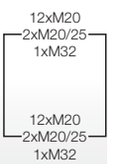
KV 8236 M

36 modules: 2 x 18 x 18 mm without PE and N terminal

- 2-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 12x M20, 2x M20/25 and 1x M32 each

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =38 watts according to EN 60670-24



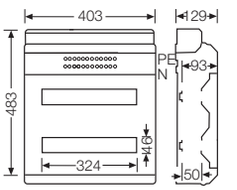


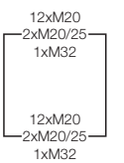
KV 2536 M

36 modules: 2 x 18 x 18 mm

- 2-row
- per PE/N number x cross section 8 x 25 mm², 32 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 12x M20, 2x M20/25 and 1x M32 each

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =38 watts according to EN 60670-24



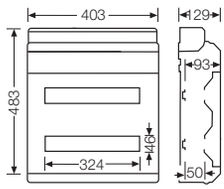


KV small-type distribution boards
Circuit breaker boxes
Cable entry via metric knockouts

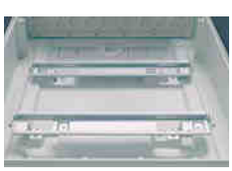
KV 2636 M

36 modules: 2 x 18 x 18 mm
without PE and N terminal

- 2-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 12x M20, 2x M20/25 and 1x M32 each



rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =38 watts according to EN 60670-24

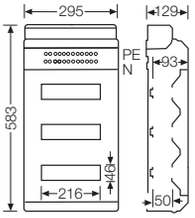


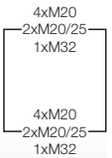
Variable installation depth by mounting DIN-rails in different levels

Included blanking strips

KV 9336 M

36 modules: 3 x 12 x 18 mm



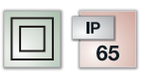


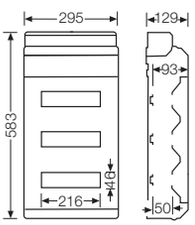
- 3-row
- per PE/N number x cross section 6 x 25 mm², 24 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings

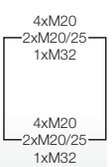
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =35 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 28 watts at 30 K according to DIN 43871

KV 8336 M

36 modules: 3 x 12 x 18 mm without PE and N terminal







- 3-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 4x M20, 2x M20/25 and 1x M32 each

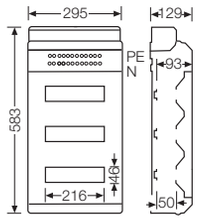
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =35 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 28 watts at 30 K according to DIN 43871

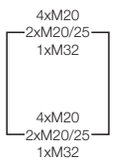
KV small-type distribution boards
Circuit breaker boxes
Cable entry via metric knockouts

KV 3536 M

36 modules: 3 x 12 x 18 mm

- 3-row
- per PE/N number x cross section 6 x 25 mm², 24 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 4x M20, 2x M20/25 and 1x M32 each

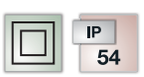




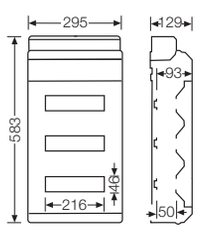
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =35 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 28 watts at 30 K according to DIN 43871

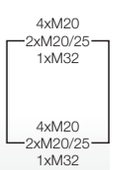
KV 3636 M

36 modules: 3 x 12 x 18 mm without PE and N terminal

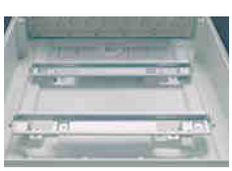


- 3-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 4x M20, 2x M20/25 and 1x M32 each





rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =35 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 28 watts at 30 K according to DIN 43871

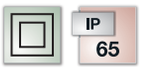


Variable installation depth by mounting DIN-rails in different levels

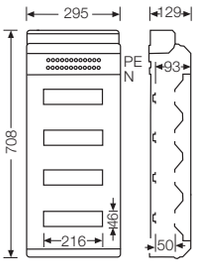
Included blanking strips

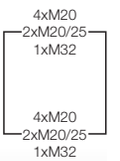
KV 9448 M

48 modules: 4 x 12 x 18 mm



- 4-row
- per PE/N number x cross section 6 x 25 mm², 24 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 4x M20, 2x M20/25 and 1x M32 each

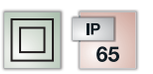




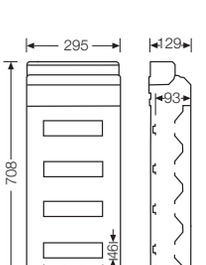
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =43 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 34 watts at 30 K according to DIN 43871

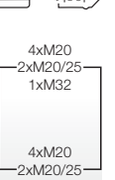
KV 8448 M

48 modules: 4 x 12 x 18 mm without PE and N terminal



- 4-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 4x M20, 2x M20/25 and 1x M32 each





rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =43 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 34 watts at 30 K according to DIN 43871

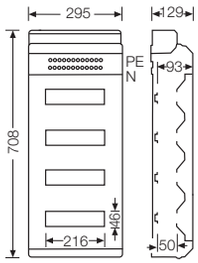
KV small-type distribution boards

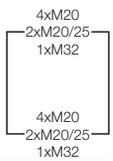
Circuit breaker boxes
Cable entry via metric knockouts

KV 4548 M

48 modules: 4 x 12 x 18 mm

- 4-row
- per PE/N number x cross section 6 x 25 mm², 24 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 4x M20, 2x M20/25 and 1x M32 each



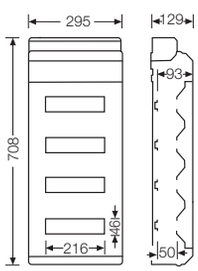


rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =43 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 34 watts at 30 K according to DIN 43871

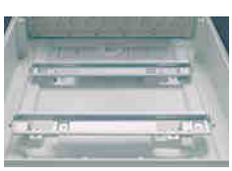
KV 4648 M

48 modules: 4 x 12 x 18 mm without PE and N terminal

- 4-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 4x M20, 2x M20/25 and 1x M32 each



rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =43 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 34 watts at 30 K according to DIN 43871

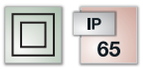


Variable installation depth by mounting DIN-rails in different levels

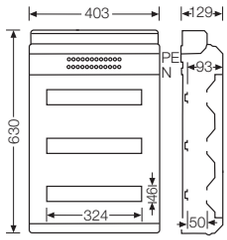
Included blanking strips

KV 9354 M

54 modules: 3 x 18 x 18 mm



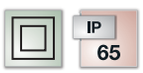
- 3-row
- per PE/N number x cross section 8 x 25 mm², 32 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings



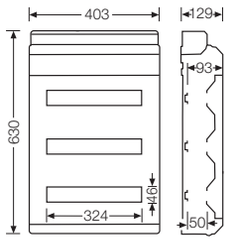
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =50 watts according to EN 60670-24

KV 8354 M

54 modules: 3 x 18 x 18 mm without PE and N terminal



- 3-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 12x M20, 2x M20/25 and 1x M32 each

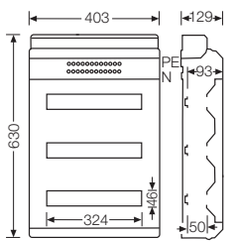


rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =50 watts according to EN 60670-24

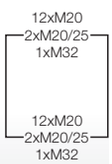
KV 3554 M

54 modules: 3 x 18 x 18 mm

- 3-row
- per PE/N number x cross section 8 x 25 mm², 32 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 12x M20, 2x M20/25 and 1x M32 each



rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =50 watts according to EN 60670-24



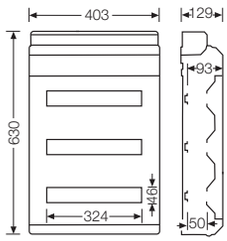
KV small-type distribution boards

Circuit breaker boxes
Cable entry via metric knockouts

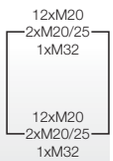
KV 3654 M

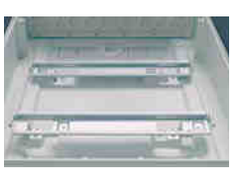
54 modules: 3 x 18 x 18 mm without PE and N terminal

- 3-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 12x M20, 2x M20/25 and 1x M32 each



rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =50 watts according to EN 60670-24





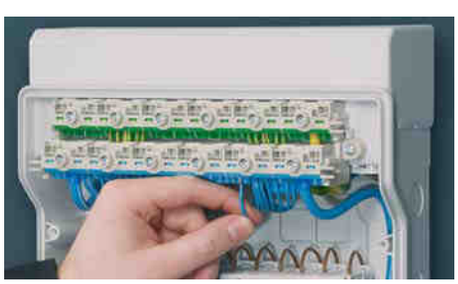
Variable installation depth by mounting DIN-rails in different levels

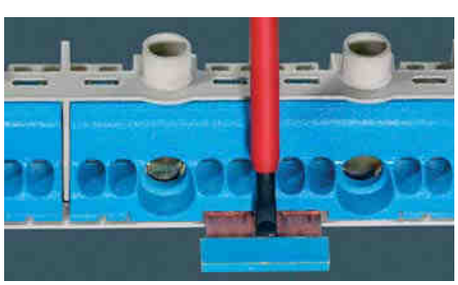
Included blanking strips

KV small-type distribution boards

Circuit breaker box

”Weatherproof“ for outdoor installation





- Compact user friendly solution, optically optimized by cable entry cover
- Integrated compartment for accessories - everything has its proper place
- DIN-rails with stopper for proper position of installation device
- Screws made of stainless steel V2A
- Cable entry via integrated elastic membranes
- Cable entry via metric knockouts
- FIXCONNECT® plug-in terminal technology for PE and N
- Connection for copper conductors
- KV Small-type distribution boards with up to four disconnectable N-potentials in one bar enable the installation of RCDs without additional efforts or accessories
- 12 to 54 modules: attached blanking strips for DIN rail equipment openings
- 3 to 9 modules: protective cover can be cut out
- Material: polycarbonate
- Burning behaviour: Glow wire test in accordance with IEC 60695-2-11: 960 °C, flame-retardant, self-extinguishing
- Colour: grey, RAL 7035

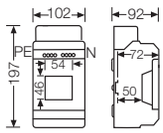
KV small-type distribution boards

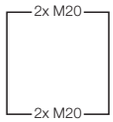
Circuit breaker boxes "weatherproof", for outdoor installation
Cable entry via metric knockouts

KV PC 9103

3 modules: 1 x 3 x 18 mm

- 1-row
- per PE/N number x cross section 1 x 25 mm², 4 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out



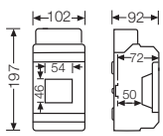


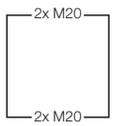
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =10 watts according to EN 60670-24

KV PC 6103

3 modules: 1 x 3 x 18 mm without PE and N terminal

- 1-row
- knockouts: top and bottom walls 2x M20 each
- order PE/N terminals separately
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out



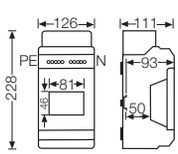


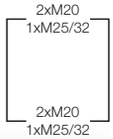
rated insulation voltage	U_i = 400 V a.c. U_i = 1000 V d.c.
power dissipation capability	P_{de} =10 watts according to EN 60670-24

KV PC 9104

4.5 modules: 1 x 4.5 x 18 mm

- 1-row
- per PE/N number x cross section 2 x 25 mm², 4 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out





rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =12 watts according to EN 60670-24

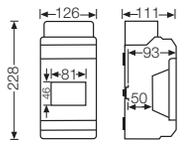
3 to 9 modules: protective cover can be cut out

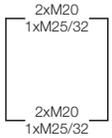
British Standard installation with earthed armoured cables

KV PC 6104

4.5 modules: 1 x 4.5 x 18 mm without PE and N terminal

- 1-row
- knockouts: top and bottom walls 2x M20 and 1x M25/32 each
- order PE/N terminals separately
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out



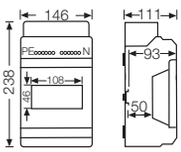


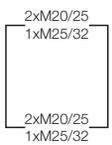
rated insulation voltage	U_i = 400 V a.c. U_i = 1000 V d.c.
power dissipation capability	P_{de} =12 watts according to EN 60670-24

KV PC 9106

6 modules: 1 x 6 x 18 mm

- 1-row
- knockouts: top and bottom walls 2x M20/25 and 1x M25/32 each
- per PE/N number x cross section 2 x 25 mm², 4 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out



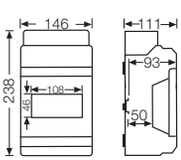


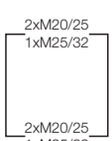
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =13 watts according to EN 60670-24

KV PC 6106

6 modules: 1 x 6 x 18 mm without PE and N terminal

- 1-row
- knockouts: top and bottom walls 2x M20/25 and 1x M25/32 each
- order PE/N terminals separately
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out





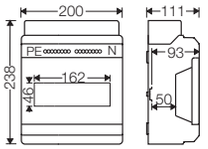
rated insulation voltage	U_i = 400 V a.c. U_i = 1000 V d.c.
power dissipation capability	P_{de} =13 watts according to EN 60670-24

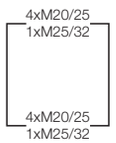
KV small-type distribution boards

Circuit breaker boxes „weatherproof“, for outdoor installation
Cable entry via metric knockouts

KV PC 9109

9 modules: 1 x 9 x 18 mm



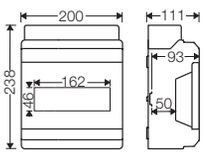


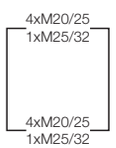
- 1-row
- per PE/N number x cross section 2 x 25 mm², 8 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =16 watts according to EN 60670-24

KV PC 6109

9 modules: 1 x 9 x 18 mm
without PE and N terminal





- 1-row
- knockouts: top and bottom walls 4x M20/25 and 1x M25/32 each
- order PE/N terminals separately
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent lid, sealable
- locking device for hinged lid and sealing facility see accessories
- with cable entry cover
- protective cover can be cut out

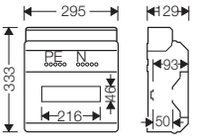
rated insulation voltage	U_i = 400 V a.c. U_i = 1000 V d.c.
power dissipation capability	P_{de} =16 watts according to EN 60670-24

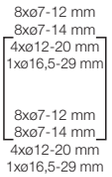
3 to 9 modules: protective cover can be cut out

British Standard installation with earthed armoured cables

KV PC 9112

12 modules: 1 x 12 x 18 mm



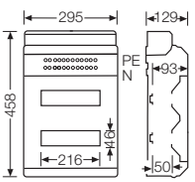


- 1-row
- cable entry via integrated elastic membranes
- per PE/N number x cross section 3 x 25 mm², 12 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, for up to 2 different potentials
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- lateral enclosure connections can be managed by drilling

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =26 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 21 watts at 30 K according to DIN 43871

KV PC 9224

24 modules: 2 x 12 x 18 mm



- 2-row
- cable entry via integrated elastic membranes
- per PE/N number x cross section 6 x 25 mm², 24 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- lateral enclosure connections can be managed by drilling

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =31 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 25 watts at 30 K according to DIN 43871

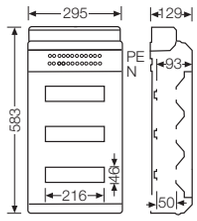
KV small-type distribution boards

Circuit breaker boxes „weatherproof“, for outdoor installation
Cable entry via integrated elastic membranes

KV PC 9336

36 modules: 3 x 12 x 18 mm

- 3-row
- cable entry via integrated elastic membranes
- per PE/N number x cross section 6 x 25 mm², 24 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- lateral enclosure connections can be managed by drilling

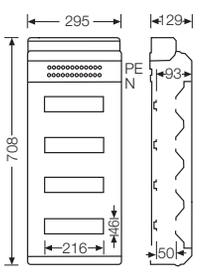


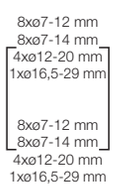
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =35 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 28 watts at 30 K according to DIN 43871

KV PC 9448

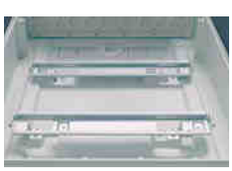
48 modules: 4 x 12 x 18 mm

- 4-row
- cable entry via integrated elastic membranes
- per PE/N number x cross section 6 x 25 mm², 24 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- lateral enclosure connections can be managed by drilling





rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =43 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 34 watts at 30 K according to DIN 43871



Variable installation depth by mounting DIN-rails in different levels

Included blanking strips

KV small-type distribution boards

KV small-type distribution boards

Conduit entry via integrated elastic membranes

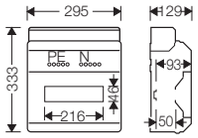
- Integrated compartment for accessories - everything has its proper place
- Screws made of stainless steel V2A
- Conduit entry via integrated elastic membranes
- FIXCONNECT® plug-in terminal technology for PE and N
- Connection for copper conductors
- KV Small-type distribution boards with up to four disconnectable N-potentials in one bar enable the installation of RCDs without additional efforts or accessories
- 12 to 54 modules: attached blanking strips for DIN rail equipment openings
- Material: polystyrene
- Burning behaviour:
  glow wire test in accordance with IEC 60695-2-11: 750 °C,
  flame-retardant, self-extinguishing
- Colour: grey, RAL 7035

KV small-type distribution boards

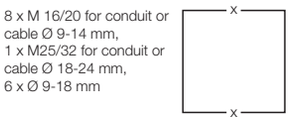
Circuit breaker boxes
Conduit entry via integrated elastic membranes

KV 1712

12 modules: 1 x 12 x 18 mm



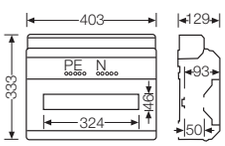
- 1-row
- per PE/N number x cross section 3 x 25 mm², 12 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, for up to 2 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- with cable glands for conduits and elastic membranes



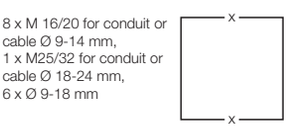
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =26 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 21 watts at 30 K according to DIN 43871

KV 1718

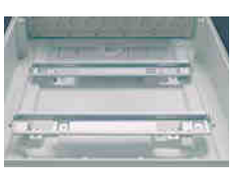
18 modules: 1 x 18 x 18 mm



- 1-row
- per PE/N number x cross section 4 x 25 mm², 16 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, for up to 2 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- with cable glands for conduits and elastic membranes



rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =33 watts according to EN 60670-24

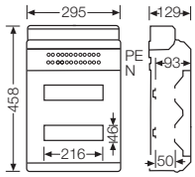


Variable installation depth by mounting DIN-rails in different levels

Included blanking strips

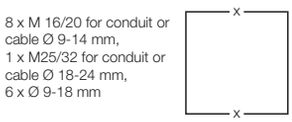
KV 2724

24 modules: 2 x 12 x 18 mm



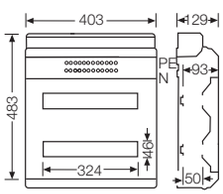
- 2-row
- per PE/N number x cross section 6 x 25 mm², 24 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- with cable glands for conduits and elastic membranes

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =31 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 25 watts at 30 K according to DIN 43871



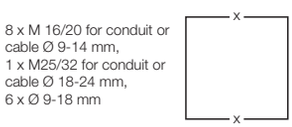
KV 2736

36 modules: 2 x 18 x 18 mm



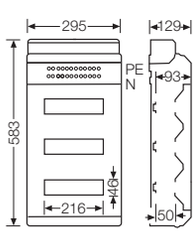
- 2-row
- per PE/N number x cross section 8 x 25 mm², 32 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- with cable glands for conduits and elastic membranes

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =38 watts according to EN 60670-24



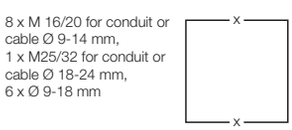
KV 3736

36 modules: 3 x 12 x 18 mm



- 3-row
- per PE/N number x cross section 6 x 25 mm², 24 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- with cable glands for conduits and elastic membranes

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =35 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 28 watts at 30 K according to DIN 43871



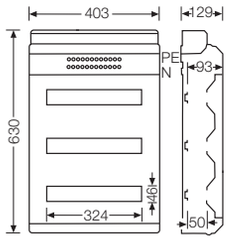
KV small-type distribution boards

Circuit breaker boxes
Conduit entry via integrated elastic membranes

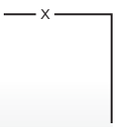
KV 3754

54 modules: 3 x 18 x 18 mm

- 3-row
- per PE/N number x cross section 8 x 25 mm², 32 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- with cable glands for conduits and elastic membranes



8 x M 16/20 for conduit or cable Ø 9-14 mm,
1 x M25/32 for conduit or cable Ø 18-24 mm,
6 x Ø 9-18 mm

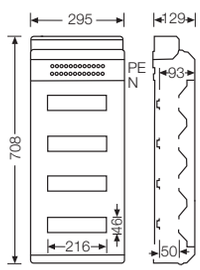


rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =50 watts according to EN 60670-24

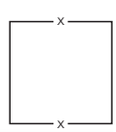
KV 4748

48 modules: 4 x 12 x 18 mm

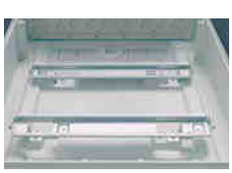
- 4-row
- per PE/N number x cross section 6 x 25 mm², 24 x 4 mm² Cu, FIXCONNECT® terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- with cable glands for conduits and elastic membranes



8 x M 16/20 for conduit or cable Ø 9-14 mm,
1 x M25/32 for conduit or cable Ø 18-24 mm,
6 x Ø 9-18 mm



rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =43 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 34 watts at 30 K according to DIN 43871



Variable installation depth by mounting DIN-rails in different levels

Included blanking strips

KV small-type distribution boards

Circuit breaker boxes with additional space for electrical devices not to be manually actuated

Cable entry via elastic membranes

- Pre-assembly and wiring in the workshop is possible in case of built-in terminal blocks
- Within the same enclosure standard-conforming installation devices (sizes according to DIN 43880) and non-operator-controlled devices can be installed
- Compact user friendly solution, optically optimized by cable entry cover
- Integrated compartment for accessories - everything has its proper place
- DIN-rails with stopper for proper position of installation device
- Screws made of stainless steel V2A
- Cable entry via integrated elastic membranes
- 12 to 36 modules: blanking strips for unused DIN rail openings included
- Burning behaviour: glow wire test in accordance with IEC 60695-2-11: 750 °C, flame-retardant, self-extinguishing
- Colour: grey, RAL 7035

KV small-type distribution boards

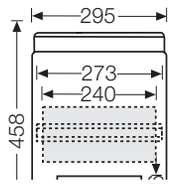
Circuit breaker boxes with additional space for electrical devices not to be manually actuated
Cable entry via integrated elastic membranes

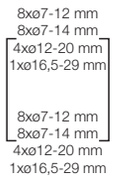
KV 9220

12 modules: 1 x 12 x 18 mm without PE and N terminal

IP 65

- 1-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with additional space for electrical devices not to be manually actuated
- with 1 DIN rail, 273 mm wide, for DIN rail equipment and terminal blocks with max. mounting depth 72 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes





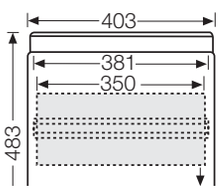
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =26 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 21 watts at 30 K according to DIN 43871

KV 9230

18 modules: 1 x 18 x 18 mm without PE and N terminal

IP 65

- 1-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with additional space for electrical devices not to be manually actuated
- with 1 DIN rail, 381 mm wide, for DIN rail equipment and terminal blocks with max. mounting depth 72 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes



rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =33 watts according to EN 60670-24

Included blanking strips

KV small-type distribution boards

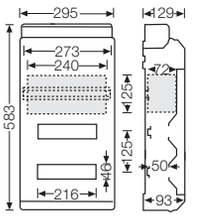
Circuit breaker boxes with additional space for electrical devices not to be manually actuated
Cable entry via integrated elastic membranes

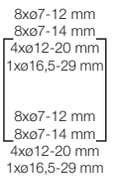
KV 9330

24 modules: 2 x 12 x 18 mm without PE and N terminal

IP 65

- 2-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with additional space for electrical devices not to be manually actuated
- with 1 DIN rail, 273 mm wide, for DIN rail equipment and terminal blocks with max. mounting depth 72 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes





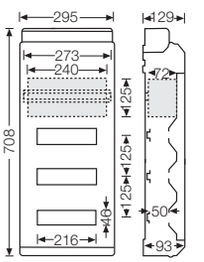
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =31 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 25 watts at 30 K according to DIN 43871

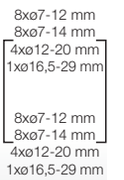
KV 9440

36 modules: 3 x 12 x 18 mm without PE and N terminal

IP 65

- 3-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with additional space for electrical devices not to be manually actuated
- with 1 DIN rail, 273 mm wide, for DIN rail equipment and terminal blocks with max. mounting depth 72 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes





rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =35 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 28 watts at 30 K according to DIN 43871

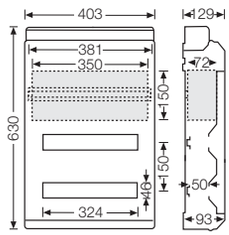
KV small-type distribution boards

Circuit breaker boxes with additional space for electrical devices not to be manually actuated
Cable entry via integrated elastic membranes

KV 9350

36 modules: 2 x 18 x 18 mm without PE and N terminal

- 2-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with additional space for electrical devices not to be manually actuated
- with 1 DIN rail, 381 mm wide, for DIN rail equipment and terminal blocks with max. mounting depth 72 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- cable entry via integrated elastic membranes



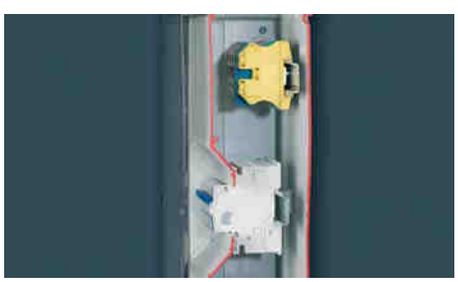
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =38 watts according to EN 60670-24

Included blanking strips

KV small-type distribution boards

Circuit breaker boxes with additional space for electrical devices not to be manually actuated

Cable entry via metric knockouts



- Pre-assembly and wiring in the workshop is possible in case of built-in terminal blocks
- Within the same enclosure standard-conforming installation devices (sizes according to DIN 43880) and non-operator-controlled devices can be installed
- Compact user friendly solution, optically optimized by cable entry cover
- Integrated compartment for accessories - everything has its proper place
- DIN-rails with stopper for proper position of installation device
- Screws made of stainless steel V2A
- Cable entry via metric knockouts
- 12 to 36 modules: blanking strips for unused DIN rail openings included
- Burning behaviour: glow wire test in accordance with IEC 60695-2-11: 750 °C, flame-retardant, self-extinguishing
- Colour: grey, RAL 7035

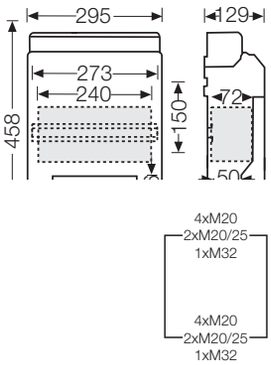
KV small-type distribution boards

Circuit breaker boxes with additional space for electrical devices not to be manually actuated
Cable entry via metric knockouts

KV 9220 M

12 modules: 1 x 12 x 18 mm without PE and N terminal

IP 65



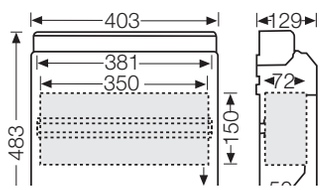
- 1-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with additional space for electrical devices not to be manually actuated
- with 1 DIN rail, 273 mm wide, for DIN rail equipment and terminal blocks with max. mounting depth 72 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 4x M20, 2x M20/25 and 1x M32 each

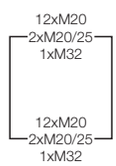
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =26 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 21 watts at 30 K according to DIN 43871

KV 9230 M

18 modules: 1 x 18 x 18 mm without PE and N terminal

IP 65





- 1-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with additional space for electrical devices not to be manually actuated
- with 1 DIN rail, 381 mm wide, for DIN rail equipment and terminal blocks with max. mounting depth 72 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 12x M20, 2x M20/25 and 1x M32 each

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =33 watts according to EN 60670-24

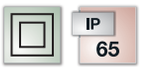
Included blanking strips

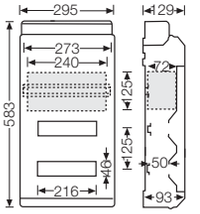
KV small-type distribution boards

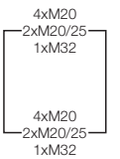
Circuit breaker boxes with additional space for electrical devices not to be manually actuated
Cable entry via metric knockouts

KV 9330 M

24 modules: 2 x 12 x 18 mm without PE and N terminal





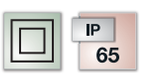


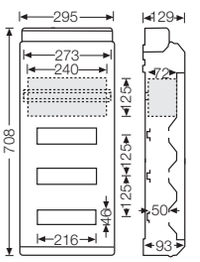
- 2-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with additional space for electrical devices not to be manually actuated
- with 1 DIN rail, 273 mm wide, for DIN rail equipment and terminal blocks with max. mounting depth 72 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 4x M20, 2x M20/25 and 1x M32 each

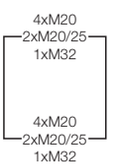
rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =31 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 25 watts at 30 K according to DIN 43871

KV 9440 M

36 modules: 3 x 12 x 18 mm without PE and N terminal







- 3-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with additional space for electrical devices not to be manually actuated
- with 1 DIN rail, 273 mm wide, for DIN rail equipment and terminal blocks with max. mounting depth 72 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 4x M20, 2x M20/25 and 1x M32 each

rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =35 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 28 watts at 30 K according to DIN 43871

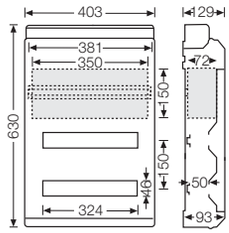
KV small-type distribution boards

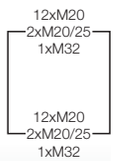
Circuit breaker boxes with additional space for electrical devices not to be manually actuated
Cable entry via metric knockouts

KV 9350 M

36 modules: 2 x 18 x 18 mm
without PE and N terminal

- 2-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with additional space for electrical devices not to be manually actuated
- with 1 DIN rail, 381 mm wide, for DIN rail equipment and terminal blocks with max. mounting depth 72 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with blanking strips for unused DIN rail openings
- knockouts: top and bottom walls 12x M20, 2x M20/25 and 1x M32 each





rated insulation voltage	U_i = 400 V a.c.
power dissipation capability	P_{de} =38 watts according to EN 60670-24

Included blanking strips

KV small-type distribution boards

KV small-type distribution boards

Circuit breaker boxes
Flanges without knockouts, cable entries can be drilled individually

- Cable entry via flanges which can be drilled individually
- Compact user friendly solution, optically optimized by cable entry cover
- Integrated compartment for accessories - everything has its proper place
- DIN-rails with stopper for proper position of installation device
- Screws made of stainless steel V2A
- Blanking strips for unused DIN rail openings
- Burning behaviour: glow wire test in accordance with IEC 60695-2-11: 750 °C, flame-retardant, self-extinguishing
- Colour: grey, RAL 7035

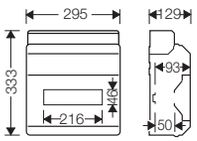
KV small-type distribution boards

Circuit breaker boxes
with flanges for individual drilling of cable entries

KV 8112 G

12 modules: 1 x 12 x 18 mm without PE and N terminal

IP 65



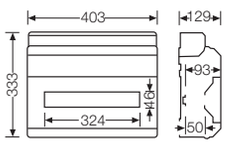
- 1-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with two flanges which can be drilled individually, closed. Useable area 52 mm x 252 mm
- with blanking strips for unused DIN rail openings

power dissipation capability	P_{de} =26 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 21 watts at 30 K according to DIN 43871

KV 8118 G

18 modules: 1 x 18 x 18 mm without PE and N terminal

IP 65



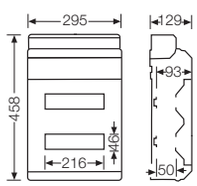
- 1-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with two flanges which can be drilled individually, closed. Useable area 52 mm x 252 mm
- with blanking strips for unused DIN rail openings

power dissipation capability	P_{de} =33 watts according to EN 60670-24

KV 8224 G

24 modules: 2 x 12 x 18 mm without PE and N terminal

IP 65



- 2-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with two flanges which can be drilled individually, closed. Useable area 52 mm x 252 mm
- with blanking strips for unused DIN rail openings

power dissipation capability	P_{de} =31 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 25 watts at 30 K according to DIN 43871

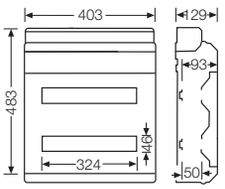
Included blanking strips

KV small-type distribution boards

Circuit breaker boxes
with flanges for individual drilling of cable entries

KV 8236 G

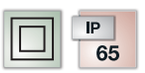
36 modules: 2 x 18 x 18 mm
without PE and N terminal



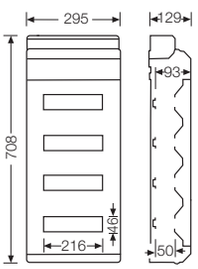
- 2-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with two flanges which can be drilled individually, closed. Useable area 52 mm x 252 mm
- with blanking strips for unused DIN rail openings

power dissipation capability	P_{de} =38 watts according to EN 60670-24

KV 8448 G



48 modules: 4 x 12 x 18 mm
without PE and N terminal



- 4-row
- order PE/N terminals separately
- for the installation of DIN rail equipment, top hat profile 35 mm
- with transparent door
- for door locking device and sealing device refer to accessories
- with cable entry cover
- with two flanges which can be drilled individually, closed. Useable area 52 mm x 252 mm
- with blanking strips for unused DIN rail openings

power dissipation capability	P_{de} =43 watts according to EN 60670-24
permissible power dissipation	P_{zul} = 34 watts at 30 K according to DIN 43871

Included blanking strips

KV small-type distribution boards

Empty enclosures

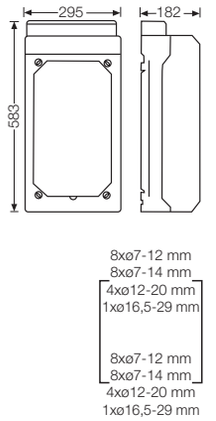
Cable entry via integrated, elastic membranes

- Compact user friendly solution, optically optimized by cable entry cover
- DIN-rails with stopper for proper position of installation device
- cable entry via elastic membranes
- Screws made of stainless steel V2A
- Burning behaviour: glow wire test in accordance with IEC 60695-2-11: 750 °C, flame-retardant, self-extinguishing
- Colour: grey, RAL 7035

KV 9331

Degree of protection: IP 65

- for installation of devices via installed mounting plate
- max. installation depth: 160 mm
- thermal power dissipation capability see diagram in the index technical data
- with transparent lid
- fastener for tool operation
- sealable
- with cable entry cover
- cable entry via integrated elastic membranes



rated insulation voltage	U_i = 1000 V a.c.
Impact strength	IK 08 (5 Joule)
static load	mounting plate or DIN rail = 9.2 kg lid = 3.2 kg
power dissipation capability at $\Delta\vartheta$ =40 K	P_{de} =63 W
relative power dissipation capability in watts per K	p_{de} = 1.575 watts per K

KV empty box in application

KV small-type distribution boards

Meter box

Cable entry via integrated elastic membranes

- Compact user friendly solution, optically optimized by cable entry cover
- DIN-rails with stopper for proper position of installation device
- Sealable
- Screws made of stainless steel V2A
- Burning behaviour: glow wire test in accordance with IEC 60695-2-11: 750 °C, flame-retardant, self-extinguishing
- Colour: grey, RAL 7035

KV small-type distribution boards

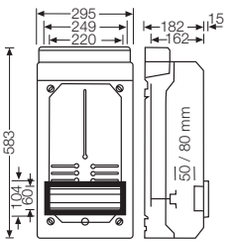
KWH Meter Boxes
cable entry via integrated elastic membranes

KV 9337

IP 65

Use in areas under control or reponsibility of local power supply companies
degree of protection: IP 65

- with KWH meter support and meter fastening screws for meters with three-point mounting
- max. installation depth: 162 mm
- with hinged flap and protection cover for 12 modules (12 x 18 mm)
- with DIN-rail belonging to it
- with transparent lid
- fasteners for tool operation
- sealable
- with cable entry cover
- cable entry via integrated elastic membranes



8xø7-12 mm
8xø7-14 mm
4xø12-20 mm
1xø16,5-29 mm

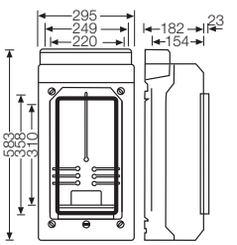
8xø7-12 mm
8xø7-14 mm
4xø12-20 mm
1xø16,5-29 mm

KV 9338

IP 54

Use in areas under control or reponsibility of local power supply companies
degree of protection: IP 54

- with KWH meter support and meter fastening screws for meters with three-point mounting
- max. installation depth: 154 mm
- with KWH meter window flap, sealable
- for maximum KWH meters, time switches etc.
- standard opening dimensions 140 x 310 mm
- for tool or manual operation
- for padlock (clip Ø max. 6 mm)
- with additional DIN rail
- length of DIN rail 172 mm
- with transparent lid
- fasteners for tool operation
- sealable
- with cable entry cover
- cable entry via integrated elastic membranes



8xø7-12 mm
8xø7-14 mm
4xø12-20 mm
1xø16,5-29 mm

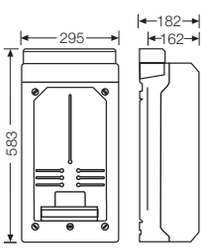
8xø7-12 mm
8xø7-14 mm
4xø12-20 mm
1xø16,5-29 mm

KV 9339

IP 65

Use in areas under control or reponsibility of local power supply companies
degree of protection: IP 65

- with KWH meter support and meter fastening screws for meters with three-point mounting
- max. installation depth: 162 mm
- with additional DIN rail
- length of DIN rail 172 mm
- with transparent lid
- fasteners for tool operation
- sealable
- with cable entry cover
- cable entry via integrated elastic membranes



8xø7-12 mm
8xø7-14 mm
4xø12-20 mm
1xø16,5-29 mm

8xø7-12 mm
8xø7-14 mm
4xø12-20 mm
1xø16,5-29 mm

KV small-type distribution boards

Accessories

Terminals	212 - 213
Labelling system	213
Cable entry covers	214
Locking device, sealing device	215
Spare keys	215
Blanking strip	215

KV FC 03

PE and N terminal
per PE/N 1 x 25 mm², 4 x 4 mm² Cu

- for small-type distribution boards with 3 modules
- FIXCONNECT® plug-in terminal technology, for terminal technology refer to technical data
- current carrying capacity: 101 A

rated insulation voltage	U_i = 690 V a.c.

KV FC 04

PE and N terminal
per PE/N 2 x 25 mm², 4 x 4 mm², Cu

- for small-type distribution boards with 4.5 modules
- FIXCONNECT® plug-in terminal technology, for terminal technology refer to technical data
- current carrying capacity: 101 A

rated insulation voltage	U_i = 690 V a.c.

KV FC 06

PE and N terminal
per PE/N 2 x 25 mm², 4 x 4 mm², Cu

- for small-type distribution boards with 6 modules
- FIXCONNECT® plug-in terminal technology, for terminal technology refer to technical data
- current carrying capacity: 101 A

rated insulation voltage	U_i = 690 V a.c.

KV FC 09

PE and N terminal
PE/N 2 x 25 mm², 8 x 4 mm², Cu each

- for small-type distribution boards with 9 modules
- FIXCONNECT® plug-in terminal technology, for terminal technology refer to technical data
- current carrying capacity: 101 A

rated insulation voltage	U_i = 690 V a.c.

KV FC 12

PE and N terminal
per PE/N 3 x 25 mm², 12 x 4 mm², Cu

- for small-type distribution boards with 12 modules and KV empty boxes
- FIXCONNECT® plug-in terminal technology, for terminal technology refer to technical data
- N separable, for up to 2 different potentials
- current carrying capacity: 75 A

rated insulation voltage	U_i = 690 V a.c.

KV FC 18

PE and N terminal
per PE/N 4 x 25 mm², 16 x 4 mm², Cu

- for small-type distribution boards with 18 modules per row
- FIXCONNECT® plug-in terminal technology, for terminal technology refer to technical data
- N separable, for up to 2 different potentials
- current carrying capacity: 75 A

rated insulation voltage	U_i = 690 V a.c.

KV FC 24

PE and N terminal
per PE/N 6 x 25 mm², 24 x 4 mm², Cu

- for small-type distribution boards with 12 modules and KV empty boxes
- FIXCONNECT® plug-in terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- current carrying capacity: 75 A

rated insulation voltage	U_i = 690 V a.c.

KV FC 36

PE and N terminal
per PE/N 8 x 25 mm², 32 x 4 mm², Cu

- for small-type distribution boards with 18 modules per row
- FIXCONNECT® plug-in terminal technology, for terminal technology refer to technical data
- N separable, up to 4 different potentials
- current carrying capacity: 75 A

rated insulation voltage	U_i = 690 V a.c.

FC BS 5

FIXCONNECT labelling system
set with 5 pieces

- labelling system for FIXCONNECT® plug-in terminals, not for terminals 2x25 / 4x4 mm²
- for attaching of labelling strips or marking with felt tip pen

FC BS 6

FIXCONNECT labelling system
set with 5 pieces

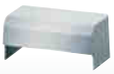
- labelling system for FIXCONNECT® plug-in terminals, for terminals 2x25 / 4x4 mm²
- for attaching of labelling strips or marking with felt tip pen

FIXCONNECT® plug-in terminal technology

KV EB 03

Cable entry cover

- for small-type distribution boards with 3 modules
- for replacement purposes
  (1 cable entry cover included with supply of the board)



KV EB 04

Cable entry cover

- for small-type distribution boards with 4.5 modules
- for replacement purposes
  (1 cable entry cover included with supply of the board)

KV EB 06

Cable entry cover

- for small-type distribution boards with 6 modules
- for replacement purposes
  (1 cable entry cover included with supply of the board)

KV EB 09

Cable entry cover

- for small-type distribution boards with 9 modules
- and for KV 9325, KV 9363
- for replacement purposes
  (1 cable entry cover included with supply of the board)

KV EB 12

Cable entry cover

- for small-type distribution boards with 12 modules per row
- only order additionally if the cable entry should be covered at the top and bottom
  (1 cable entry cover included with supply of the board)

KV EB 18

Cable entry cover

- for small-type distribution boards with 18 modules per row
- only order additionally if the cable entry should be covered at the top and bottom
  (1 cable entry cover included with supply of the board)

KV EB 26

Cable entry cover

- for small-type distribution boards KV 0112, KV 0212, KV 0124, KV 0224, KV 0136, KV 0236
- only order additionally if the cable entry should be covered at the top and bottom
  (1 cable entry cover included with supply of the board)

Compact user friendly solution, optically optimized by cable entry cover

KV ES 1

Locking device
for small-type distribution boards 12 - 54 modules

- profile cylinder with 2 keys

KV ES 2

Spare key

- for door lock KV ES 1 or KV ES 3
- 2 pieces

KV ES 3

Locking device
for small-type distribution boards 3 - 9 modules

- and for KV 9325, KV 9363
- profile cylinder with 2 keys

KV PL 2

Sealing device
for small-type distribution boards 12 - 54 modules

- for sealing the top and bottom parts of the box (doors can be sealed without accessories)

KV PL 3

Sealing device
for small-type distribution boards 3 - 9 modules

- and for KV 9325, KV 9363
- for sealing the top and bottom parts of the box (doors can be sealed without accessories)

AS 12

RAL 7035

Blanking strip
12 modules

- 12 x 18 mm, divisible every 9 mm
- for the covering of spare equipment openings, for material thickness up to 3 mm

AS 18

RAL 7035

Blanking strip
18 modules

- 18 X 18 mm, divisible every 9 mm
- for the covering of spare equipment openings, for material thickness up to 3 mm

Sealing of top and bottom part

Blanking strips for unused DIN rail openings

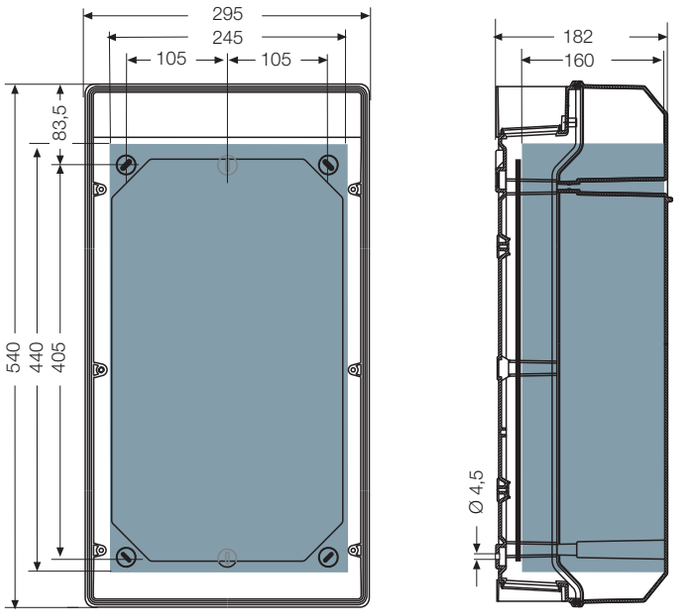
KV small-type distribution boards

Technical details

Mounting dimensions in mm	217 -218
Lateral box assembly	219
Terminals	220 - 221
Standards	221
Permissible power dissipation	221
Operating and ambient conditions	222

KV small-type distribution boards

Technical details
Dimensions in mm



KV 9331

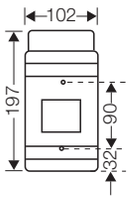
= usable installation area with mounted cable glands

KV small-type distribution boards

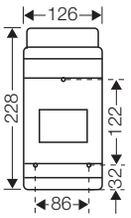
Technical details
Mounting dimensions in mm

Wall mounting for screws up to 4.5 mm diameter.

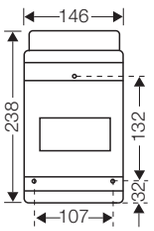
Circuit breaker boxes
3 modules



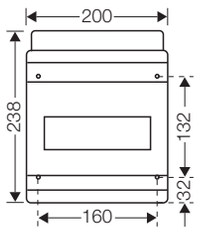
Circuit breaker boxes
4.5 modules



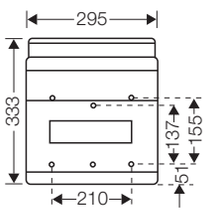
Circuit breaker boxes
6 modules



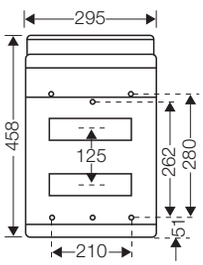
Circuit breaker boxes
9 modules



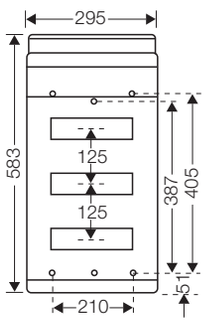
Circuit breaker boxes
12 modules



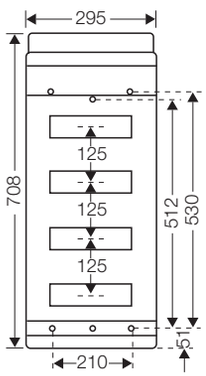
Circuit breaker boxes
2 x 12 modules



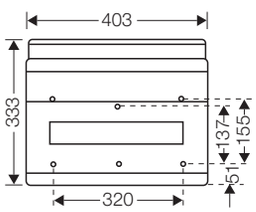
Circuit breaker boxes
3 x 12 modules



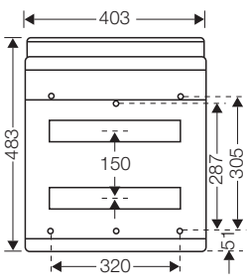
Circuit breaker boxes
4 x 12 modules



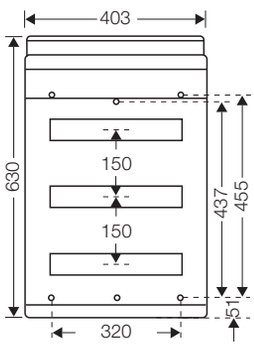
Circuit breaker boxes
1 x 18 modules

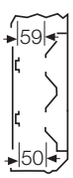


Circuit breaker boxes
2 x 18 modules

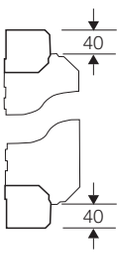


Circuit breaker boxes
3 x 18 modules





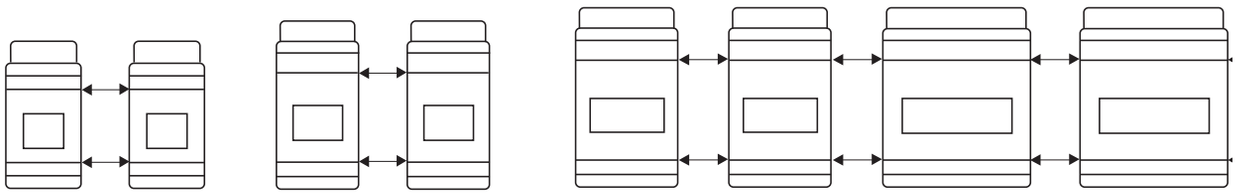
By turning the rail by 180 °, the assembly depth under the protection cover can be increased to 59 mm. No additional components are required.



Cable entry cover for KV Circuit breaker boxes IP 54 and IP 65 with 12-54 modules mounted on top and the bottom.

KV Circuit breaker boxes can be assembled laterally as shown below:

- in degree of protection IP 65 with threaded connecting glands AVS 16
- in degree of protection IP 54 with press-in connecting glands EVS 16



KV Circuit breaker boxes 3 modules

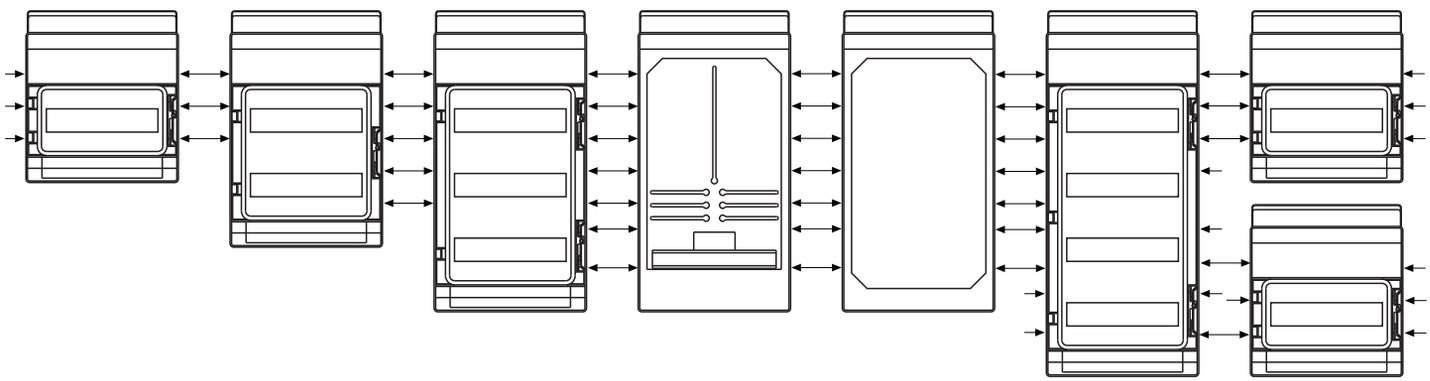
KV Circuit breaker boxes 4.5 modules

KV Circuit breaker boxes 6 modules

KV Circuit breaker boxes 9 modules

KV Circuit breaker / Meter and Empty boxes can be assembled laterally as shown below:

- in degree of protection IP 65 with threaded connecting glands AVS 16
- in degree of protection IP 54 with press-in connecting glands EVS 16



KV circuit breaker boxes 12 modules

KV circuit breaker boxes 2x12 modules, KV 9220, KV 9220 M

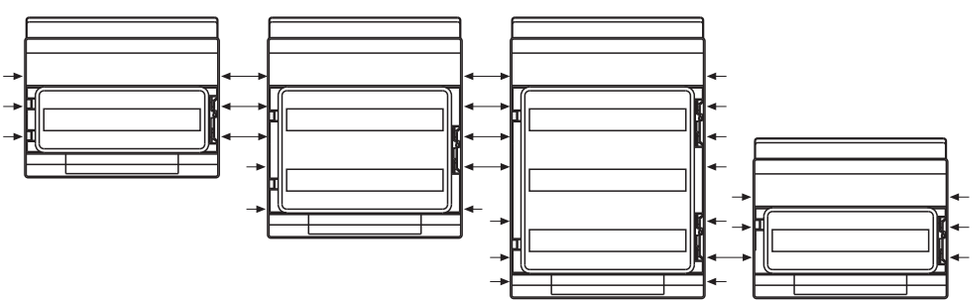
KV circuit breaker boxes 3x12 modules, KV 9330, KV 9330 M

KWH Meter boxes KV 9338 KV 9337

KV empty box 4x12 modules KV 9440, KV 9440 M

KV empty box 4x12 modules KV 9440 KV 9440 M

KV circuit breaker boxes 12 modules



KV circuit breaker boxes 18 modules

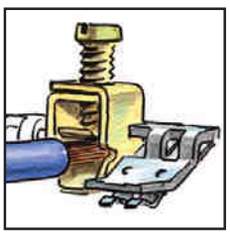
KV circuit breaker boxes 2 x 18 modules, KV 9230, KV 9230 M

KV circuit breaker boxes 3 x 18 modules, KV 9350 KV 9350 M

KV circuit breaker boxes 18 modules

PE and N FIXCONNECT® terminal

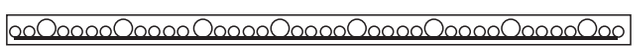
Rated connecting capacity of PE and N terminals for copper conductors

Clamping unit	Corresponding cross-sections/copper				
	max. number	from - to max.		max. number	from - to max.
Screw-type terminal 25 mm²					
	1 1 1 3 3 4 4	25 mm², s 16 mm², s 10 mm², sol 6 mm², sol 4 mm², sol 2.5 mm², sol 1.5 mm², sol	Tested as connecting terminal for several conductors of the same cross-sections for using in one circuit	1 1 1 1 1 1 1	25 mm², f 16 mm², f 10 mm², f 6 mm², f 4 mm², f 2.5 mm², f 1.5 mm², f
Plug-in terminal 4 mm² 	1	1.5 - 4 mm², sol		1	1.5 - 4 mm², f Without end ferrule; clamping unit has to be opened with a tool when conductor is inserted

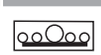
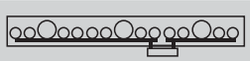
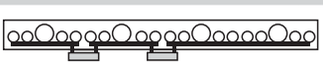
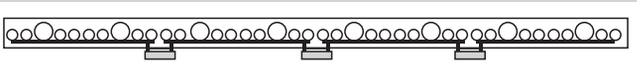
Current carrying capacity of the connecting device: 75 A
All terminals are secured against self loosening.

Terminal equipment and number of conductors to be connected

PE terminal for copper conductors

Number of modules	PE terminal	
	up to 4 mm²	up to 25 mm²
3	 4x4 mm²	1x25 mm²
4.5 6	 4x4 mm²	2x25 mm²
9	 8x4 mm²	2x25 mm²
12	 12x4 mm²	2x25 mm²
18	 16x4 mm²	4x25 mm²
24 36 (3-row) 48	 24x4 mm²	6x25 mm²
36 (2-row) 54	 32x4 mm²	8x25 mm²

N terminal for copper conductors

Number of modules	N terminal		
	up to 4 mm²	up to 25 mm²	plug-in jumper
3	 4x4 mm²	1x25 mm²	
4.5 6	 4x4 mm²	2x25 mm²	
9	 8x4 mm²	2x25 mm²	
12	 12x4 mm²	2x25 mm²	
18	 16x4 mm²	4x25 mm²	
24 36 (3-row) 48	 24x4 mm²	6x25 mm²	
36 (2-row) 54	 32x4 mm²	8x25 mm²	

Standards and regulations

- DIN EN 60670-24: Particular requirements for enclosures for housing protective devices and other power dissipating electrical equipment
- DIN 43880
  Built-in equipment for electrical installations; overall dimensions and related mounting dimensions
- IEC 60 999, Connecting devices
  Safety requirements forscrew-type and screwless-type clamping units for electrical copper conductors
- EN 60 529 / DIN VDE 0470 Part 1
  Degrees of protection provided by enclosures (IP-Code)

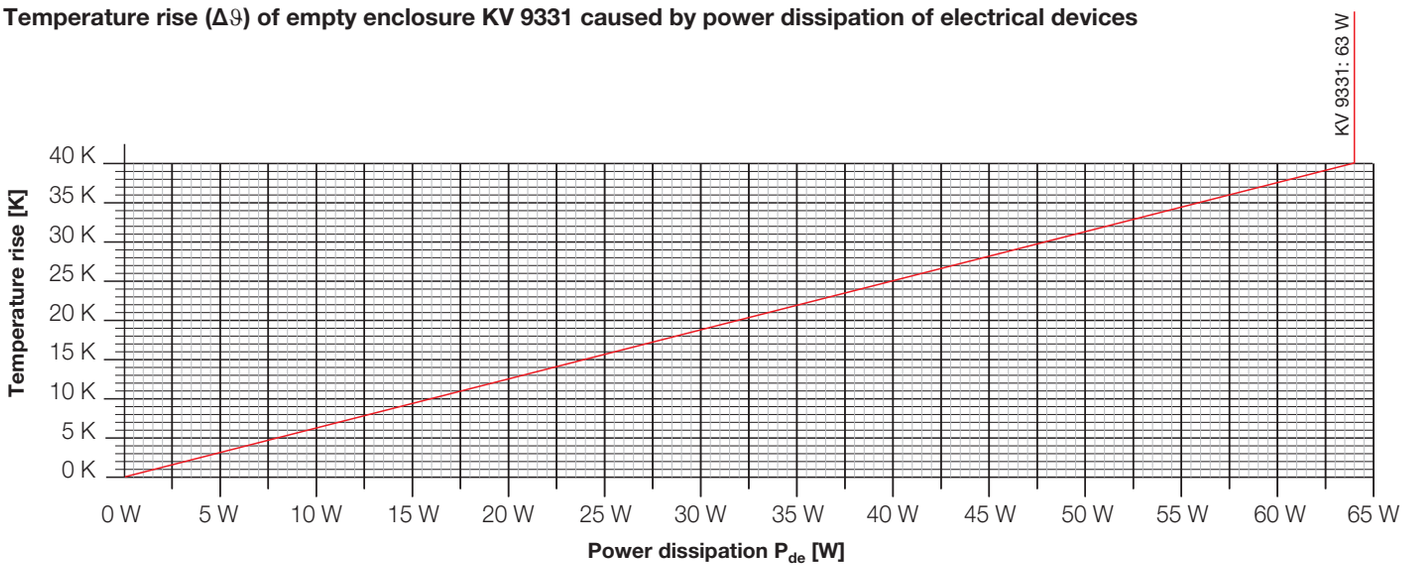
Table 4: Permissible power dissipation for distribution boards

Table 4

Permissible power dissipation P_{zul} for distribution boards for wall-mounting at overtemperature $_{\Delta}T$

size	10 K	15 K	20 K	25 K	30 K
1-row	5.5 W	9.0 W	12.5 W	16.5 W	21.0 W
2-row	6.5 W	11.0 W	15.0 W	20.0 W	25.0 W
3-row	7.0 W	12.0 W	17.0 W	22.0 W	28.0 W
4-row	8.5 W	14.5 W	20.5 W	27.0 W	34.0 W

Temperature rise (Δϑ) of empty enclosure KV 9331 caused by power dissipation of electrical devices



	KV Small-type distribution boards PS polystyrene		KV PC Small-type distribution boards PC polycarbonate
	KV Small-type distribution boards and KWH Meter boxes	**Empty boxes**	**KV PC Small-type distribution boards**
Application area	**Degree of protection IP 54/65:** Suitable for indoor installation and outdoor installation, protected against weather influences: However, pay attention to the climatic effects on the installed equipment , for example, high or low ambient temperatures or formation of condensed water see technical information		The enclosures are suitable for outdoor installation - harsh environment and / or outdoor. The material is examined for UV resistance by the institute for plastics and thereby suitable for the outdoor installation during UV effect. However the climatic influences and effects on the equipment are to be considered.
Ambient temperature			
- Average value over 24 hours	+ 35 °C	–	+ 35 °C
- Maximum value	+ 40 °C	+ 60 °C	+ 40 °C
- Minimum value	– 5 °C	– 25 °C	– 5 °C
Relative humidity - short-time	50% at 40 °C 100% at 25 °C	– –	– –
Fire protection in the case of internal faults	Demands placed on electrical devices from standards and laws: Minimum requirements - Glow wire test in accordance with IEC 60 695-2-11: - 650 °C for boxes and cable glands - 850 °C for parts of insulating material necessary to retain current carrying parts in position		
Burning behaviour - Glow wire test IEC 60 695-2-11 - UL Subject 94	750 °C V-2 flame-retardant self-extinguishing	750 °C V-2 flame-retardant self-extinguishing	960 °C V-2 flame-retardant self-extinguishing
Degree of protection against mechanical load	IK08 (5 Joule)	IK08 (5 Joule)	IK08 (5 Joule)
Toxic behaviour	halogen-free silicone-free	halogen-free silicone-free	halogen-free silicone-free

"Halogen-free" in accordance with IEC 60754-2 "Common test methods for cables - Determination of the amount of halogen acid gas".

For material properties see technical data.

ENYSTAR®

ENYSTAR
Distribution boards up to 250 A

with door, in accordance with IEC 61439-3

- **combinable enclosure system**
- **degree of protection: IP 66**
- **made from polycarbonate**
- **protection class II, ⧈**

IEC 61439-3: Interface characteristics of an assembly 226 - 227

System description / System design 228 - 233

Overview product range 234 - 235

Empty enclosures

Door locking with hand-operation 236 - 242

Door locking with tool-operation 243 - 248

Circuit breaker boxes

for the installation of DIN rail equipment **up to 63 A** according to DIN 43880,

with PE- and N terminals, 9 up to 54 modules 249 - 253

for miniature circuit breakers (MCB) 253

without PE- and N terminals, 12 up to 54 modules 254 - 259

Circuit breaker boxes

for the installation of DIN rail equipment **up to100 A** according to DIN 43880,

without PE- and N terminals, 12 up to 54 modules, 260 - 261

for miniature circuit breakers (MCB) 261

terminal box 262

Accessories 263 - 281

Techical details 282 - 297

Further technical information can be found on the Internet
www.hensel-electric.de -> Products

ENYSTAR

IEC 61439
Standard-conforming rating of distribution boards intended to be operated by ordinary persons (DBO)

Standard-conforming rating of distribution boards

The IEC 61439 - the standard for the construction of switchgear assemblies - brings changes that affect the planning of a switchgear assembly. In addition, new tasks and responsibilities are awaiting the manufacturer of a switchgear assembly.

Decisive for the optimal functioning of a switchgear assembly under operating conditions is the correct rating of the interface characteristics of the assembly. For this purpose, the assembly is considered as **BLACK-BOX** with four interface characteristics which shall ensure compatibility with the ratings of the circuits to which it is connected and the installation conditions and shall be declared by the assembly manufacturer using the criteria identified below.

Assembly considered as BLACK BOX with the four interface characteristics according to IEC 61439-2, -3

Installation and ambient conditions

- For protected outdoor installation
- Degree of protection IP 66
- Combinable enclosure system, extendable in all directions
- 4 enclosure sizes in grid of 90 mm
- EMC compliant busbar system
- Wall-mounting

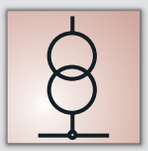
Operation and maintainance

- Distribution board up to 250 A intended to be operated by ordinary persons in accordance with IEC 61439-3
- Protection class II up to rated current of 250 A
- Flexible through standardised and tested kits
- Spacious connection areas
- Fulfill the requirements for operation by ordinary persons (DBO)

BLACK BOX
with 4 interfaces

Combinable enclosure system, insulation-enclosed, total insulated, degree of protection IP 66,
for the assembly of ENYSTAR distribution boards up to 250 A intended to be operated by ordinary persons (DBO) in accordance with IEC 61439-3
The requirements for all installed electrical functions within the assembly have been proved compliance with the applicable requirements of IEC 61439-3.
I_{nc} and RDF must be specified in the documentation.

ENYSTAR
Distribution Board



Connection to the electrical network

- Electric circuit / final circuit
- Circuit-breaker up to 250 A
- Switch disconnector up to 250 A
- Fuse switch disconnector up to 250 A
- Bus-mounted fuse base up to 63 A
- Cable connection from top / from bottom
- Connection: conductors from copper / aluminum
- Optional connection of CEE sockets according to EN 60309 and sockets with earthing contact according to DIN 49440-1

Circuits and consumers

- Rated voltage U_N = 690 V a.c. / 1000 V d.c.
- Rated current I_N up to 250 A
- Circuit-breaker up to 250 A
- Switch disconnector up to 250 A
- Fuse switch disconnector up to 250 A
- 5-conductor systems
- Cable connection from top / from bottom

Changes facing the manufacturer of a switchgear assembly (Panel builder)

IEC 61439 - the standard for the assembly of switchgear assemblies and distribution boards - determines the safety requirements for electrical equipment for the compliance of protection objectives for people and facilities. Requirements for products are more clearly defined and a new terminology is introduced.

BLACK BOX Specification

The designer specifies a switchgear assembly by defining the interface parameters as BLACK BOX. Based on these interface specifications the manufacturer of a switchgear assembly has to rate and define the structure of the switchgear assembly.

Product presentation in media changed significantly

The standard has an effect as well on the documentation of products. Additional information, such as the rated current of circuits and the number of circuits, are now listed for each product as they are now required by designers and manufacturers for the construction of switchgear assemblies.

The international catalogue presents ENYSTAR empty and circuit breaker boxes.

Further enclosures with electrical functions for the assembly of ENYSTAR distribution boards up to 250 A, for example, with built-in busbars, circuit breakers, etc., see at: www.hensel-electric.de

For design and assembly according IEC 61439 / EN 61439 with ENYSTAR Distribution Boards up to 250 A please refer to the guide at www.hensel-elctric.de/61439.

The guide to design and assemble in accordance with EN 61439 for ENYSTAR distribution boards up to 250 A and Mi Power distribution boards up to 630 A can be downloaded:

www.hensel-electric.de/en

ENYGUIDE

Planning tool Configurator ENYGUIDE at www.enyguide.eu

Free planning software ENYGUIDE: allows the quick and easy configuration of distribution boards.

- Dimensional drawings and parts lists are automatically created by ENYGUIDE.
- Representation of the distribution board as a detailed 3D-image or a 2D-drawing.
- Various view planes show the equipment, covers and doors.
- ENYGUIDE determines the necessary accessories such as the number of wall separators independently.
- No time-consuming program installation is needed.

www.enyguide.eu

Distribution boards up to 250 A with door

combinable enclosure system, insulation-enclosed, degree of protection IP 66, made from polycarbonate,
for the assembly of distribution boards up to 250 A, intended to be operated by ordinary persons in accordance with IEC 61439-3

- for indoor and protected outdoor installation
- dust-proof and protected against water (IP 66)
- protection class II ⧈
- colour: grey, RAL 7035

Material: Polycarbonate

- Burning behaviour: Glow wire test according to IEC 60695-2-11, self-extinguishing, flame-retardant
- UV resistant according to IEC 61439-1, Section 10.2.4: The material is examined for UV resistance
- Toxic behaviour: silikone- and halogen-free
- Chemical resistance: Resistant against acid 10 % and alkaline 10 %, petrol and mineral oil

Combinable enclosure system with doors

Easy operation of the devices behind a door with protection against accidential contact.

Quick assembly

Assembling ENYSTAR distribution boards according to IEC 61439-3

Doors

- all enclosure sizes with door
- transparent and opaque
- door hinge changeable
- sealable
- locking facilities: lockable, door fasteners for tool and hand operation
- operation of the devices behind the door protected with covers
- no overhangig handles

Quick Assembly

- closed or open enclosure walls,
  which can fast and easily be closed with closing plate sets
- integrated gaskets
- safe connectors

Pre-assembled enclosures with electrical functions

- Protection covers in enclosures with electrical functions
- Connection Box for the installation of devices that mus be operated externally, such as plug devices, push buttons and switches
- Cable entry via flanges up to cable diameter of 72 mm

Assembly instruction

Please request or download information:
www.hensel-electric.de/en -> Downloads

Dependent on the system

Electrical parameters

Electrical parameters

rated voltage: max. 690 V a.c.
rated insulation voltage: 690 V a.c., 1000 V d.c.
rated current: max. 250 A
rated short-time withstand current: max. 13 kA

The design values are possibly reduced by the installed equipment technology, please refer to technical data of the product or index technical data.

System properties

Environmental conditions

Ambient temperature
- for distribution boards in accordance with IEC 61439-3: -5 °C up to 35 °C, max. + 40 °C
  Relative humidity: 50% at 40 °C, 100% at 25 °C
- for empty enclosures: - 25 °C up to + 70 °C
  The climatic influences and effects on the equipment are to be considered, see technical details / operating and ambient conditions

Application area

The enclosures are suitable for outdoor installation, protected against weather influences. However, pay attentionto the climatic effects on the installed equipment, rsee operating and ambient conditions in index technical data.

Insulation

insulated enclosures
(protection class II) ⧈

Impact strength

degree of protection against mechanical load IK 08 (5 Joule) in accordance with IEC 62262

Protection against foreign solid objects and direct contact

dust-proof
degree of protection IP **6**6

Protection against ingress of water with harmful effects

protected against water
degree of protection IP 6**6**

Dependent on material

Material properties: polycarbonate

Burning behaviour

glow wire test 960 °C
in accordance with
IEC 60695-2-11
flame-retardant, self-extinguishing

UV resistance

UV resistance according to IEC 61439-1, Section 10.2.4: the material is examined for UV resistance

Chemical resistance

resistance against
acid 10% and
alkaline 10%,
petrol and mineral oil

Toxic behaviour

silicone- and halogen-free

ENYSTAR

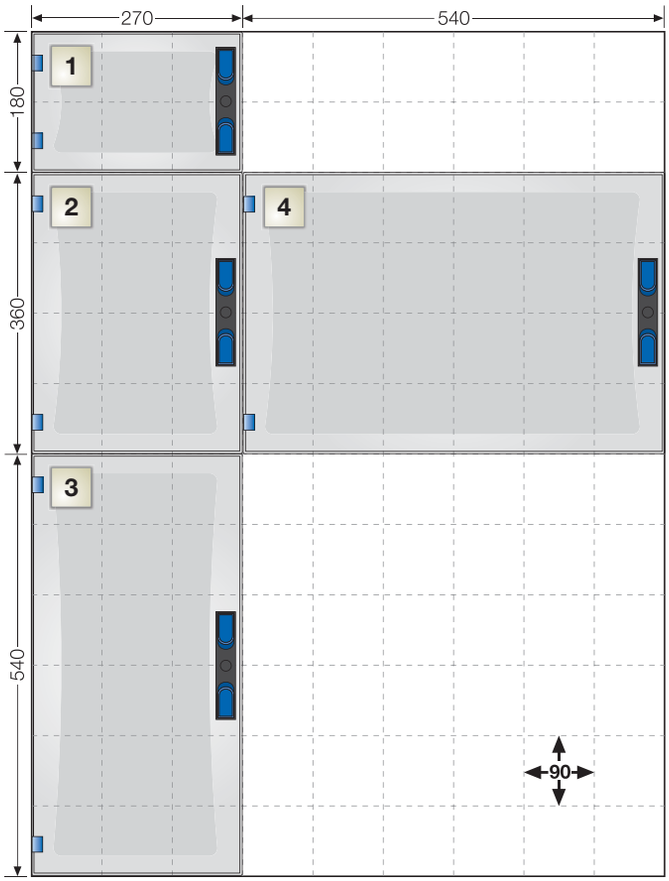
System design

Distribution board with door

- combinable
- modular structure of enclosures in grid of 90 mm
- 4 enclosure sizes: 270 x 180 mm, 270 x 360 mm, 270 x 540 mm and 540 x 360 mm
- for the assembly of distribution boards up to 250 A
- all enclosures can also be used as single enclosures

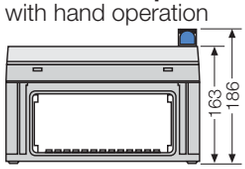
Combinable enclosures with door and closing plates

- 4 box sizes: 276 x 186 mm, 276 x 366 mm, 276 x 546 mm and 546 x 366 mm

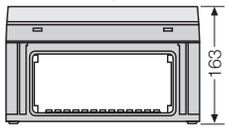


Enclosure depth

with hand operation

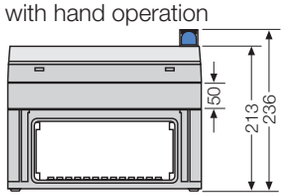


with tool operation

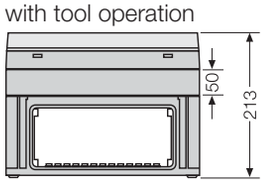


Extension frame

for extending installation depths by 50 mm with hand operation



with tool operation



ENYSTAR distributors are highly adaptable in confined spaces and therefore well suited for industrial and commercial buildings:
- modular,
- with high degree of protection,
- expandable in all directions (vertical and horizontal).

Extension frames allow the installation of devices with different installation heights.

Transparent covers:
All electrical functions at a glance. Errors can be instantly localized. The current course is always visible from the outside in the event of a fault or for retrofitting.

Flexible and expandable
even in case of retrofitting additional circuits. Depending on the number of additional required circuits matching enclosure sizes are available. They can be combined horizontally or vertically on each enclosure wall.

Electrical safety, dimensional stability
In an impact or any other mechanical stress ENYSTAR enclosures gradually buffer and spring immediately back to the original shape. A temporararily contact with live parts does not cause a short-circuit. The protection against electric shock is maintained.

Combinable distribution boards with door

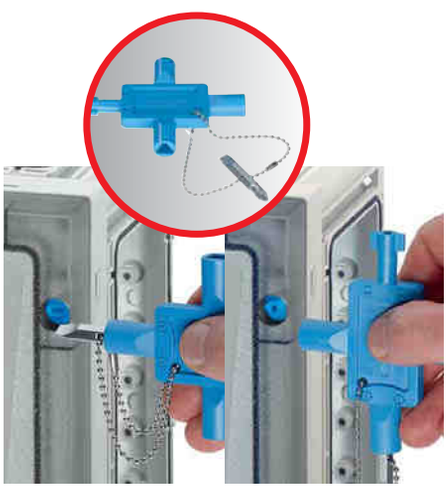
Empty enclosures
door locking
with **hand operation**
Operation and access also by unskilled persons

- Hand-operated locking facilities in areas,where electrotechnical unskilled persons operate equipment

Empty enclosures
door locking
with **tool operation**
Access and operation only by skilled persons

- Locking option with key prevents un-authorized access

Circuit breaker boxes



- Multikey for door locking systems: Standard locking system for tool-operation with slot screwdriver and triangle 8 mm, optional square lock 8 mm and double-bit.

Combinable enclosures with door and closing plates

Empty enclosures and circuit breaker boxes additionally with closing plate sets for closing enclosure walls

Enclosure walls
closed via closing plates

Flanges to be
ordered separately

ENYSTAR
System design
Assembly examples

Can be combined and extended in all directions

Because of the increasing requirements, flexibility is essential in the electrial installation.

ENYSTAR enclosures can be combined and arranged freely in order to adapt the system flexibly to the individual requirements in site: Combination next to each other or one above the other.

Large doors for all box sizes allow a simple accessibility of the electrical functions.

Combination of enclosures in vertical direction.

Combination of enclosures in horizontal direction.

Distribution boards intended to be operated by ordinary persons

Example 1:
Distribution board with
72 modules (6 x 12 x 18 mm)
built-up of 2 x FP 1318
with closing plates

Example 2:
Distribution board with 125 A feeding,
36 modules (3 x 12 x 18 mm) and
a terminal box for PE and N

1

2

ENYSTAR

Connection Box

The ENYSTAR Connection Box allows a simple and fast installation of devices that must be operated externally. Such as plug devices, pushbuttons, switches or also touch panels.

The new Connection Box is installed via safe plug connectors.

The ENYSTAR Connection Box is available in different designs and standard equipments.

ENYSTAR
System design
Assembly examples

Empty enclosures
hand-operated door lockings

with transparent doors

FP 0140
built-in dimensions
216x126x140 mm

FP 0141
built-in dimensions
216x126x140 mm
with closing plates

FP 0240
built-in dimensions
216x306x140 mm

FP 0241
built-in dimensions
216x306x140 mm
with closing plates

FP 0340
built-in dimensions
216x486x140 mm

FP 0341
built-in dimensions
216x486x140 mm
with closing plates

FP 0440
built-in dimensions
486x306x140 mm

FP 0441
built-in dimensions
486x306x140 mm
with closing plates

FP 0461
built-in dimensions
306x486x140 mm
with closing plates

with opaque doors

FP 0150
built-in dimensions
216x126x140 mm

FP 0151
built-in dimensions
216x126x140 mm
with closing plates

FP 0250
built-in dimensions
216x306x140 mm

FP 0251
built-in dimensions
216x306x140 mm
with closing plates

FP 0350
built-in dimensions
216x486x140 mm

FP 0351
built-in dimensions
216x486x140 mm
with closing plates

FP 0450
built-in dimensions
486x306x140 mm

FP 0451
built-in dimensions
486x306x140 mm
with closing plates

FP 0471
built-in dimensions
306x486x140 mm
with closing plates

Built-in equipment must be suitable for operation by electrotechnical unskilled persons and has to be protected by a cover against direct contact with hazardous life parts.

Empty boxes for the installation of different electrical devices either directly over attachments in the bottom or on DIN rails or mounting plates.

Empty enclosures
tool-operated door lockings

with transparent doors

FP 0100
built-in dimensions
216x126x140 mm

FP 0101
built-in dimensions
216x126x140 mm
with closing plates

FP 0210
built-in dimensions
216x306x140 mm

FP 0211
built-in dimensions
216x306x140 mm
with closing plates

FP 0310
built-in dimensions
216x486x140 mm

FP 0311
built-in dimensions
216x486x140 mm
with closing plates

FP 0400
built-in dimensions
486x306x140 mm

FP 0401
built-in dimensions
486x306x140 mm
with closing plates

FP 0411
built-in dimensions
306x486x140 mm
with closing plates

with opaque doors

FP 0120
built-in dimensions
216x126x140 mm

FP 0121
built-in dimensions
216x126x140 mm
with closing plates

FP 0230
built-in dimensions
216x306x140 mm

FP 0231
built-in dimensions
216x306x140 mm
with closing plates

FP 0330
built-in dimensions
216x486x140 mm
with closing plates

FP 0331
built-in dimensions
216x486x140 mm
with closing plates

FP 0420
built-in dimensions
486x306x140 mm

FP 0421
built-in dimensions
486x306x140 mm
with closing plates

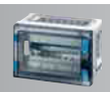
FP 0431
built-in dimensions
306x486x140 mm
with closing plates

Empty boxes for the installation of different electrical devices either directly over attachments in the bottom or on DIN rails or mounting plates.

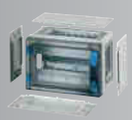
Circuit breaker boxes

with PE/N

for DIN rail equipment
up to 63 A



FP 1109
1x9x18 mm



FP 1108
1x9x18 mm
with closing plates

FP 1219
2x12x18 mm

FP 1218
2x12x18 mm
with closing plates

FP 1319
3x12x18 mm

FP 1318
3x12x18 mm
with closing plates

FP 1409
2x27x18 mm
with closing plates

FP 1408
2x27x18 mm
with closing plates

FP 1418
3x17x18 mm
with closing plates

FP 1211
1x12x18 mm
for miniature
circuit breakers
(MCB)

without PE/N

for DIN rail equipment
up to 63 A

FP 1105
1x12x18 mm
with closing plates

FP 1215
2x12x18 mm
with closing plates

FP 1315
3x12x18 mm
with closing plates

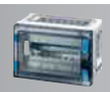
FP 1415
3x17x18 mm
with closing plates

Circuit breaker boxes for the installation of DIN rail equipment in accordance with DIN 43 880 from 9 up to 54 modules.

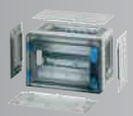
Circuit breaker boxes

without PE/N terminals

for DIN rail equipment
up to 63 A,
with removable DIN rail
rack and earth connection



FP 1106
1x9x18 mm



FP 1107
1x12x18 mm
with closing plates

FP 1216
2x12x18 mm

FP 1217
2x12x18 mm
with closing plates

FP 1316
3x12x18 mm

FP 1317
3x12x18 mm
with closing plates

FP 1406
2x27x18 mm
with closing plates

FP 1417
3x17x18 mm
with closing plates

for DIN rail equipment
up to 100 A

FP 1101
1x12x18 mm

FP 1249
2x12x18 mm

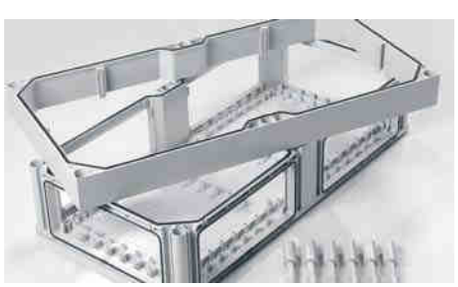
FP 1349
3x12x18 mm

FP 1439
2x27x18 mm

FP 1211
1x12x18 mm
for miniature
circuit breakers
(MCB)
with PE/N terminals

FP 1100
Terminal box

Circuit breaker boxes for the installation of DIN rail equipment in accordance with DIN 43 880 from 9 up to 54 modules.



ENYSTAR

Empty boxes

**for the assembly of distribution boards up to 250 A
intended to be operatedby ordinary persons
in accordance with IEC 61439-3**

- All enclosure sizes with door
- Transparent or opaque doors
- Device installation either on mounting plates or DIN rails
- Installation depths extendable by using extension frames
- Enclosures can also be used as single boxes when enclosure walls are covered with closing plates
- Door lockings with hand or tool operation
- Protection class II, ⧈
- Degree of protection: IP 66
- Material: PC (polycarbonate)
- Colour: grey, RAL 7035

ENYSTAR

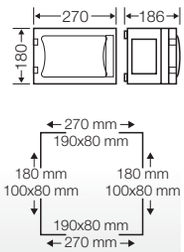
Empty boxes with transparent door

Operation and access also by unskilled persons

FP 0140

Built-in dimensions W 216 x H 126 x D 140 mm door locking with hand operation

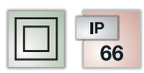
- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- box size 1
- with transparent door
- door locking sealable
- please order DIN rails, mounting plates or covers additionally
- connector: 4 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately

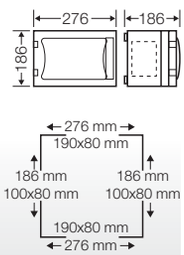


FP 0141

Built-in dimensions W 216 x H 126 x D 140 mm door locking with hand operation with closing plates for box walls

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- box size 1
- with transparent door
- door locking sealable
- please order DIN rails, mounting plates or covers additionally
- connector: 4 items
- order flanges separately

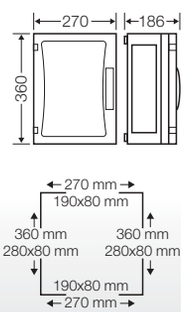




FP 0240

Built-in dimensions W 216 x H 306 x D 140 mm door locking with hand operation

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- box size 2
- with transparent door
- door locking sealable
- please order DIN rails, mounting plates or covers additionally
- connector: 4 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately



Please note:

Terminals for incoming/ outgoing cables under accessories

Covers for protection of installation device, see accessories

Empty enclosures with hinged lids

ENYSTAR

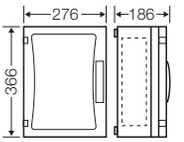
Empty boxes with transparent door

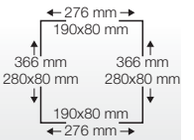
Operation and access also by unskilled persons

FP 0241

Built-in dimensions W 216 x H 306 x D 140 mm door locking with hand operation with closing plates for box walls

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- box size 2
- with transparent door
- door locking sealable
- please order DIN rails, mounting plates or covers additionally
- connector: 4 items
- order flanges separately

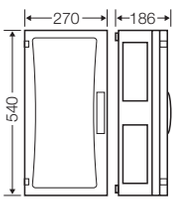


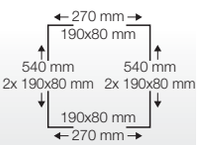


FP 0340

Built-in dimensions W 216 x H 486 x D 140 mm door locking with hand operation

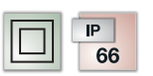
- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- box size 3
- with transparent door
- door locking sealable
- please order DIN rails, mounting plates or covers additionally
- connector: 6 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately



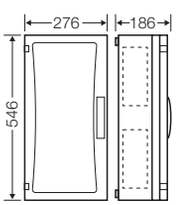


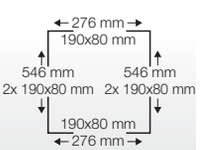
FP 0341

Built-in dimensions W 216 x H 486 x D 140 mm door locking with hand operation with closing plates for box walls



- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- box size 3
- with transparent door
- door locking sealable
- please order DIN rails, mounting plates or covers additionally
- connector: 6 items
- order flanges separately





ENYSTAR

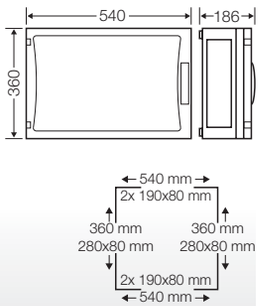
Empty boxes with transparent door

Operation and access also by unskilled persons

FP 0440

Built-in dimensions W 486 x H 306 x D 140 mm door locking with hand operation

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- box size 4
- with transparent door
- door locking sealable
- please order DIN rails, mounting plates or covers additionally
- connector: 6 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately

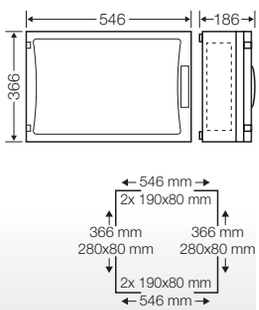


FP 0441

IP 66

Built-in dimensions W 486 x H 306 x D 140 mm door locking with hand operation with closing plates for box walls

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- box size 4
- with transparent door
- door locking sealable
- please order DIN rails, mounting plates or covers additionally
- connector: 6 items
- order flanges separately

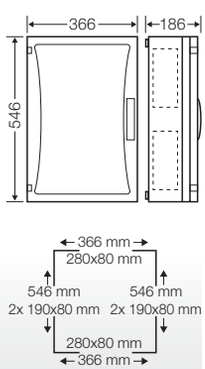


FP 0461

IP 66

Built-in dimensions W 306 x H 486 x D 140 mm door locking with hand operation with closing plates for box walls

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- box size 4
- with transparent door
- door locking sealable
- please order DIN rails, mounting plates or covers additionally
- connector: 6 items
- order flanges separately



Please note:

Terminals for incoming/ outgoing cables under accessories

Covers for protection of installation device, see accessories

Empty enclosures with hinged lids

ENYSTAR

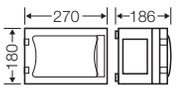
Empty boxes with opaque door

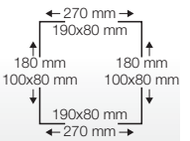
Operation and access also by unskilled persons

FP 0150

Built-in dimensions W 216 x H 126 x D 140 mm door locking with hand operation

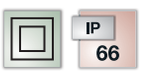
- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- with opaque door
- box size 1
- door locking sealable
- please order DIN rails, mounting plates or covers additionally
- connector: 4 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately



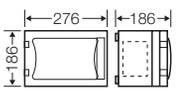


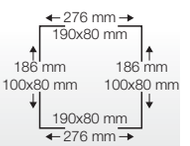
FP 0151

Built-in dimensions W 216 x H 126 x D 140 mm door locking with hand operation with closing plates for box walls



- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- with opaque door
- box size 1
- door locking sealable
- please order DIN rails, mounting plates or covers additionally
- connector: 4 items
- order flanges separately

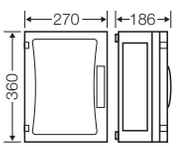


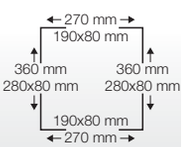


FP 0250

Built-in dimensions W 216 x H 306 x D 140 mm door locking with hand operation

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- with opaque door
- box size 2
- door locking sealable
- please order DIN rails, mounting plates or covers additionally
- connector: 4 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately





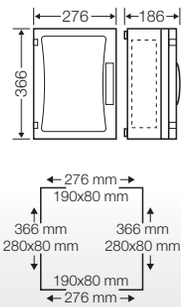
ENYSTAR
Empty boxes with opaque door
Operation and access also by unskilled persons

FP 0251

Built-in dimensions W 216 x H 306 x D 140 mm door locking with hand operation with closing plates for box walls

IP 66

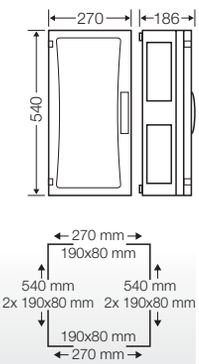
- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- with opaque door
- box size 2
- door locking sealable
- please order DIN rails, mounting plates or covers additionally
- connector: 4 items
- order flanges separately



FP 0350

Built-in dimensions W 216 x H 486 x D 140 mm door locking with hand operation

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- with opaque door
- box size 3
- door locking sealable
- please order DIN rails, mounting plates or covers additionally
- connector: 6 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately

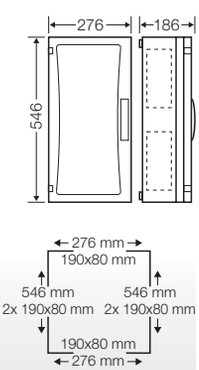


FP 0351

Built-in dimensions W 216 x H 486 x D 140 mm door locking with hand operation with closing plates for box walls

IP 66

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- with opaque door
- box size 3
- door locking sealable
- please order DIN rails, mounting plates or covers additionally
- connector: 6 items
- order flanges separately



Please note:

Terminals for incoming/ outgoing cables under accessories

Covers for protection of installation device, see accessories

Empty enclosures with hinged lids

ENYSTAR

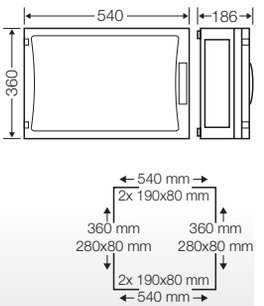
Empty boxes with opaque door

Operation and access also by unskilled persons

FP 0450

Built-in dimensions W 486 x H 306 x D 140 mm door locking with hand operation

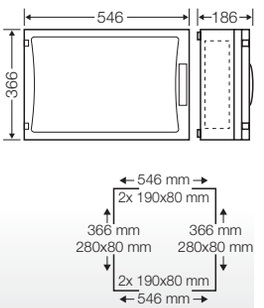
- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- with opaque door
- box size 4
- door locking sealable
- please order DIN rails, mounting plates or covers additionally
- connector: 6 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately



FP 0451

Built-in dimensions W 486 x H 306 x D 140 mm door locking with hand operation with closing plates for box walls

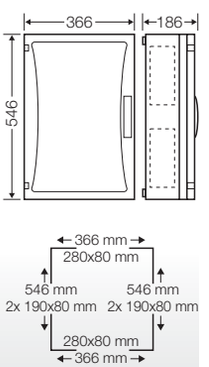
- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- with opaque door
- box size 4
- door locking sealable
- please order DIN rails, mounting plates or covers additionally
- connector: 6 items
- order flanges separately



FP 0471

Built-in dimensions W 306 x H 486 x D 140 mm door locking with hand operation with closing plates for box walls

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- with opaque door
- box size 4
- door locking sealable
- please order DIN rails, mounting plates or covers additionally
- connector: 6 items
- order flanges separately



ENYSTAR

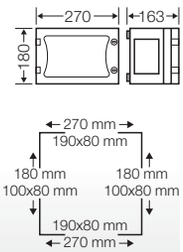
Empty boxes with transparent door

Access and operation only by skilled persons

FP 0100

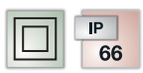
Built-in dimensions W 216 x H 126 x D 140 mm door fastener with tool operation

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- box size 1
- with transparent door
- sealing device for door sealing order separately
- please order DIN rails, mounting plates or covers additionally
- connector: 4 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately

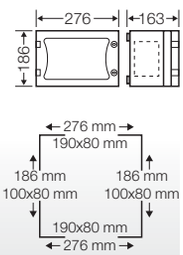


FP 0101

Built-in dimensions W 216 x H 126 x D 140 mm door fastener with tool operation with closing plates for box walls



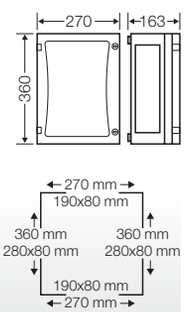
- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- box size 1
- with transparent door
- sealing device for door sealing order separately
- please order DIN rails, mounting plates or covers additionally
- connector: 4 items
- order flanges separately



FP 0210

Built-in dimensions W 216 x H 306 x D 140 mm door fastener with tool operation

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- box size 2
- with transparent door
- sealing device for door sealing order separately
- please order DIN rails, mounting plates or covers additionally
- connector: 4 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately



Please note:

Terminals for incoming/ outgoing cables under accessories

Covers for protection of installation device, see accessories

Empty enclosures with hinged lids

ENYSTAR

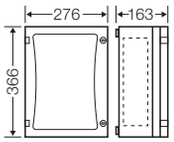
Empty boxes with transparent door

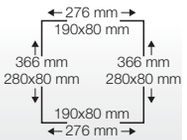
Access and operation only by skilled persons

FP 0211

Built-in dimensions W 216 x H 306 x D 140 mm door fastener with tool operation with closing plates for box walls

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- box size 2
- with transparent door
- sealing device for door sealing order separately
- please order DIN rails, mounting plates or covers additionally
- connector: 4 items
- order flanges separately

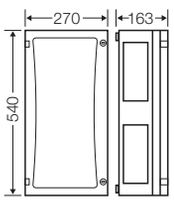


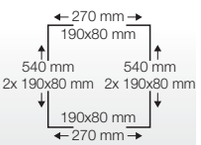


FP 0310

Built-in dimensions W 216 x H 486 x D 140 mm door fastener with tool operation

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- box size 3
- with transparent door
- sealing device for door sealing order separately
- please order DIN rails, mounting plates or covers additionally
- connector: 6 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately

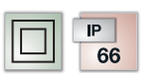


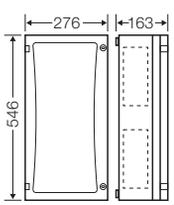


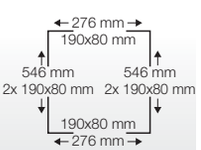
FP 0311

Built-in dimensions W 216 x H 486 x D 140 mm door fastener with tool operation with closing plates for box walls

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- box size 3
- with transparent door
- sealing device for door sealing order separately
- please order DIN rails, mounting plates or covers additionally
- connector: 6 items
- order flanges separately







ENYSTAR

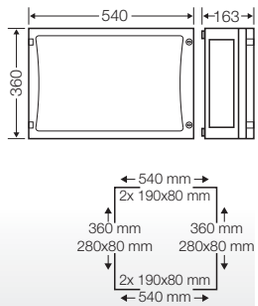
Empty boxes with transparent door

Access and operation only by skilled persons

FP 0400

Built-in dimensions W 486 x H 306 x D 140 mm door fastener with tool operation

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- box size 4
- with transparent door
- sealing device for door sealing order separately
- please order DIN rails, mounting plates or covers additionally
- connector: 6 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately

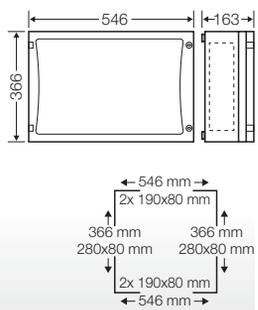


FP 0401

IP 66

Built-in dimensions W 486 x H 306 x D 140 mm door fastener with tool operation with closing plates for box walls

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- box size 4
- with transparent door
- sealing device for door sealing order separately
- please order DIN rails, mounting plates or covers additionally
- connector: 6 items
- order flanges separately

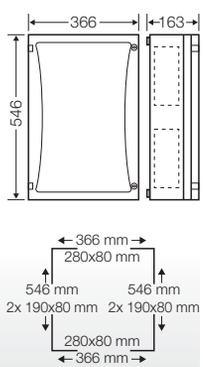


FP 0411

IP 66

Built-in dimensions W 306 x H 486 x D 140 mm door fastener with tool operation with closing plates for box walls

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- box size 4
- with transparent door
- sealing device for door sealing order separately
- please order DIN rails, mounting plates or covers additionally
- connector: 6 items
- order flanges separately



Please note:

Terminals for incoming/ outgoing cables under accessories

Covers for protection of installation device, see accessories

Empty enclosures with hinged lids

ENYSTAR

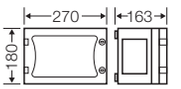
Empty Enclosures with Opaque Doors

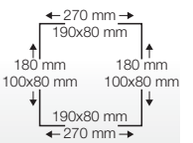
Access and operation only by skilled persons

FP 0120

Built-in dimensions W 216 x H 126 x D 140 mm door fastener with tool operation

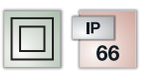
- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- with opaque door
- box size 1
- sealing device for door sealing order separately
- please order DIN rails, mounting plates or covers additionally
- connector: 4 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately



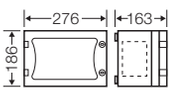


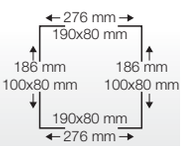
FP 0121

Built-in dimensions W 216 x H 126 x D 140 mm door fastener with tool operation with closing plates for box walls



- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- with opaque door
- box size 1
- sealing device for door sealing order separately
- please order DIN rails, mounting plates or covers additionally
- connector: 4 items
- order flanges separately

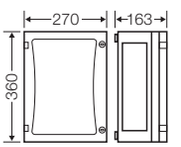


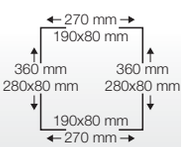


FP 0230

Built-in dimensions W 216 x H 306 x D 140 mm door fastener with tool operation

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- with opaque door
- box size 2
- sealing device for door sealing order separately
- please order DIN rails, mounting plates or covers additionally
- connector: 4 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately





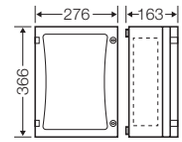
ENYSTAR
Empty Enclosures with Opaque Doors
Access and operation only by skilled persons

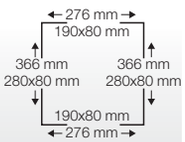
FP 0231

Built-in dimensions W 216 x H 306 x D 140 mm door fastener with tool operation with closing plates for box walls

IP 66

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- with opaque door
- box size 2
- sealing device for door sealing order separately
- please order DIN rails, mounting plates or covers additionally
- connector: 4 items
- order flanges separately

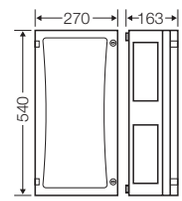


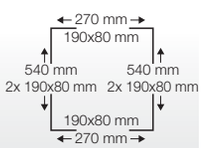


FP 0330

Built-in dimensions W 216 x H 486 x D 140 mm door fastener with tool operation

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- with opaque door
- box size 3
- sealing device for door sealing order separately
- please order DIN rails, mounting plates or covers additionally
- connector: 6 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately



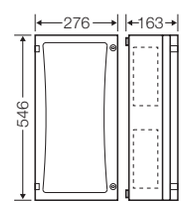


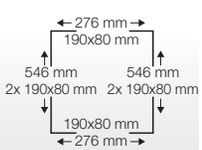
FP 0331

Built-in dimensions W 216 x H 486 x D 140 mm door fastener with tool operation with closing plates for box walls

IP 66

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- with opaque door
- box size 3
- sealing device for door sealing order separately
- please order DIN rails, mounting plates or covers additionally
- connector: 6 items
- order flanges separately





Please note:

Terminals for incoming/ outgoing cables under accessories

Covers for protection of installation device, see accessories

Empty enclosures with hinged lids

ENYSTAR

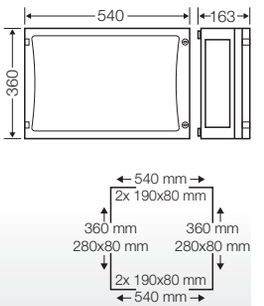
Empty Enclosures with Opaque Doors

Access and operation only by skilled persons

FP 0420

Built-in dimensions W 486 x H 306 x D 140 mm door fastener with tool operation

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- with opaque door
- box size 4
- sealing device for door sealing order separately
- please order DIN rails, mounting plates or covers additionally
- connector: 6 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately

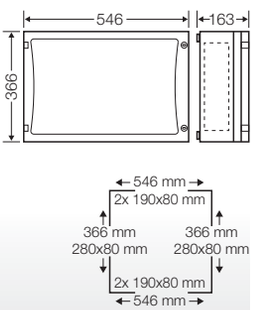


FP 0421

IP 66

Built-in dimensions W 486 x H 306 x D 140 mm door fastener with tool operation with closing plates for box walls

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- with opaque door
- box size 4
- sealing device for door sealing order separately
- please order DIN rails, mounting plates or covers additionally
- connector: 6 items
- order flanges separately

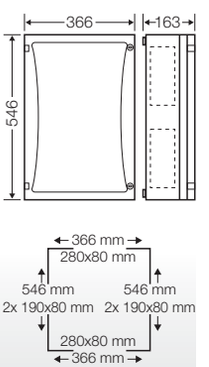


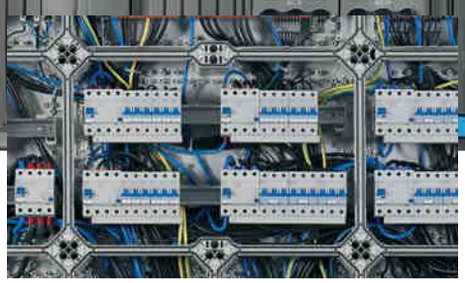
FP 0431

IP 66

Built-in dimensions W 306 x H 486 x D 140 mm door fastener with tool operation with closing plates for box walls

- max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
- with opaque door
- box size 4
- sealing device for door sealing order separately
- please order DIN rails, mounting plates or covers additionally
- connector: 6 items
- order flanges separately





ENYSTAR

Circuit breaker box

**for the assembly of distribution boards up to 250 A
intended to be operatedby ordinary persons
in accordance with IEC 61439-3**

- Transparent doors
- door locking with hand operation, lockable with tool or key
- Circuit breaker boxes with or without PE and N terminals
- Protection against direct contact with hazardous live parts for operable installation devices
- Blanking strips for unused DIN rail openings
- Attached labelling strips for circuit identification
- Enclosures can also be used as single boxes when enclosure walls are covered with closing plates
- Protection class II, ⧈
- Degree of protection: IP 66
- Material: PC (polycarbonate)
- Colour: grey, RAL 7035

ENYSTAR

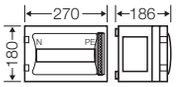
Circuit breaker boxes for the installation of DIN rail equipment up to 63 A

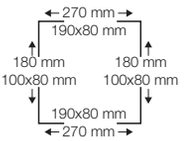
Operation and access also by unskilled persons

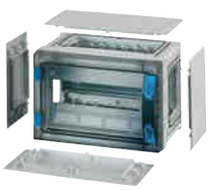
FP 1109

9 modules: 1 x 9 x 18 mm

- 1-row
- box size 1
- FIXCONNECT® plug-in terminal technology for PE and N
- PE/N 2 x 25 mm², 8 x 4 mm², Cu each
- N separable for various potentials
- for installation of DIN rail equipment up to 63 A in accordance with DIN 43880
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 4 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately

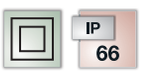




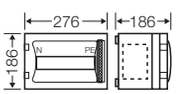


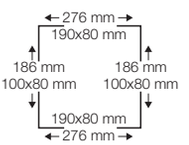
FP 1108

9 modules: 1 x 9 x 18 mm
with closing plates for box walls



- 1-row
- box size 1
- FIXCONNECT® plug-in terminal technology for PE and N
- PE/N 2 x 25 mm², 8 x 4 mm², Cu each
- N separable for various potentials
- for installation of DIN rail equipment up to 63 A in accordance with DIN 43880
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 4 items
- order flanges separately

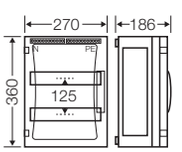


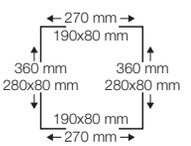


FP 1219

24 modules: 2 x 12 x 18 mm

- 2-row
- box size 2
- FIXCONNECT® plug-in terminal technology for PE and N
- per PE/N 3 x 25 mm², 12 x 4 mm², Cu
- N separable for various potentials
- for installation of DIN rail equipment up to 63 A in accordance with DIN 43880
- with transparent door
- door locking sealable
- door locking with hand operation
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 4 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately





ENYSTAR

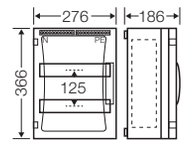
Circuit breaker boxes for the installation of DIN rail equipment up to 63 A

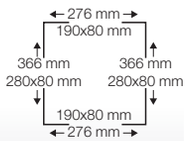
Operation and access also by unskilled persons

FP 1218

24 modules: 2 x 12 x 18 mm with closing plates for box walls

IP 66

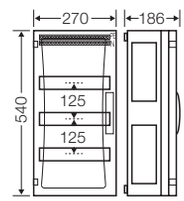


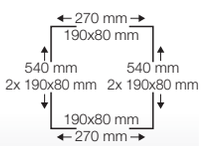


- 2-row
- box size 2
- FIXCONNECT® plug-in terminal technology for PE and N
- per PE/N 3 x 25 mm², 12 x 4 mm², Cu
- N separable for various potentials
- for installation of DIN rail equipment up to 63 A in accordance with DIN 43880
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 4 items
- order flanges separately

FP 1319

36 modules: 3 x 12 x 18 mm



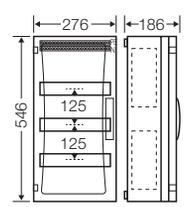


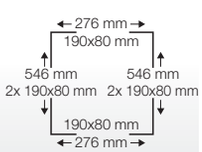
- 3-row
- box size 3
- FIXCONNECT® plug-in terminal technology for PE and N
- per PE/N 6 x 25 mm², 24 x 4 mm², Cu
- N separable for various potentials
- for installation of DIN rail equipment up to 63 A in accordance with DIN 43880
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 6 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately

FP 1318

36 modules: 3 x 12 x 18 mm with closing plates for box walls

IP 66



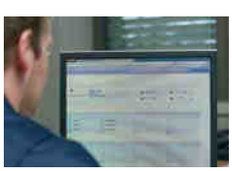


- 3-row
- box size 3
- FIXCONNECT® plug-in terminal technology for PE and N
- per PE/N 6 x 25 mm², 24 x 4 mm², Cu
- N separable for various potentials
- for installation of DIN rail equipment up to 63 A in accordance with DIN 43880
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 6 items
- order flanges separately

Please note:

Connection box for plug devices, push buttons or switches under accessories

Cover cutouts against direct contact with hazardous live parts



Editable labelling strips

ENYSTAR

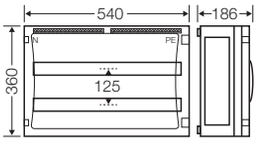
Circuit breaker boxes for the installation of DIN rail equipment up to 63 A

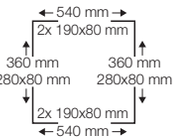
Operation and access also by unskilled persons

FP 1409

54 modules: 2 x 27 x 18 mm

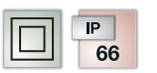
- 2-row
- box size 4
- FIXCONNECT® plug-in terminal technology for PE and N
- per PE/N 6 x 25 mm², 24 x 4 mm², Cu
- N separable for various potentials
- for installation of DIN rail equipment up to 63 A in accordance with DIN 43880
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 6 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately



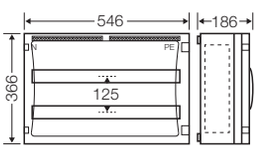


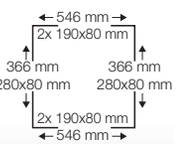
FP 1408

54 modules: 2 x 27 x 18 mm with closing plates for box walls



- 2-row
- box size 4
- FIXCONNECT® plug-in terminal technology for PE and N
- per PE/N 6 x 25 mm², 24 x 4 mm², Cu
- N separable for various potentials
- for installation of DIN rail equipment up to 63 A in accordance with DIN 43880
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 6 items
- order flanges separately

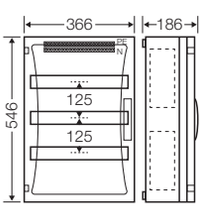


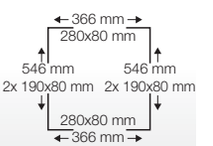


FP 1418

51 modules: 3 x 17 x 18 mm with closing plates for box walls

- 3-row
- box size 4
- FIXCONNECT® plug-in terminal technology for PE and N
- per PE/N 8 x 25 mm², 32 x 4 mm², Cu
- N separable for various potentials
- for installation of DIN rail equipment up to 63 A in accordance with DIN 43880
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 6 items
- order flanges separately





ENYSTAR

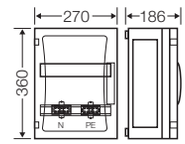
Circuit breaker boxes for the installation of DIN rail equipment up to 63 A

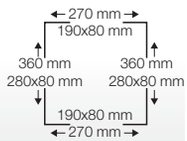
Operation and access also by unskilled persons

FP 1211

12 modules: 1 x 12 x 18 mm for miniature circuit breakers (MCB)

- 1-row
- box size 2
- with 1 DIN rail 216 mm wide (for installation depth of 72 mm)
- for installation of DIN rail equipment up to 100 A in accordance with DIN 43 880
- per PE/N 2 x 25 mm², 4 x 16 mm², Cu
- cover can be sealed
- with lockable blanking strips
- connector: 4 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately

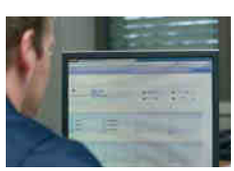




Please note:

Connection box for plug devices, push buttons or switches under accessories

Cover cutouts against direct contact with hazardous live parts



Editable labelling strips

ENYSTAR

Circuit breaker boxes for the installation of DIN rail equipment up to 63 A

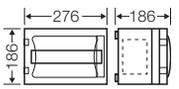
Operation and access also by unskilled persons

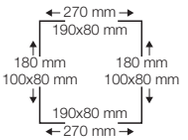
FP 1105

12 modules: 1 x 12 x 18 mm without PE and N terminal with closing plates for box walls

IP 66

- 1-row
- box size 1
- for installation of DIN rail equipment up to 63 A in accordance with DIN 43880
- order PE/N terminals separately
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 4 items
- walls closed with closing plates, closing plate set included
- order flanges separately



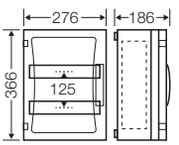


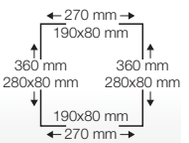
FP 1215

24 modules: 2 x 12 x 18 mm without PE and N terminal with closing plates for box walls

IP 66

- 2-row
- box size 2
- order PE/N terminals separately
- for installation of DIN rail equipment up to 63 A in accordance with DIN 43880
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 4 items
- walls closed with closing plates, closing plate set included
- order flanges separately



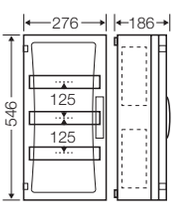


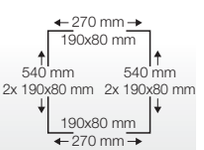
FP 1315

36 modules: 3 x 12 x 18 mm without PE and N terminal with closing plates for box walls

IP 66

- 3-row
- box size 3
- order PE/N terminals separately
- for installation of DIN rail equipment up to 63 A in accordance with DIN 43880
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 6 items
- walls closed with closing plates, closing plate set included
- order flanges separately





ENYSTAR

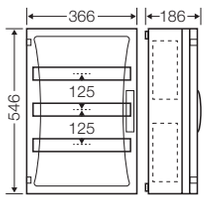
Circuit breaker boxes for the installation of DIN rail equipment up to 63 A

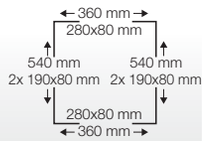
Operation and access also by unskilled persons

FP 1415

51 modules: 3 x 17 x 18 mm
without PE and N terminal
with closing plates for box walls

- 3-row
- box size 4
- order PE/N terminals separately
- for installation of DIN rail equipment up to 63 A in accordance with DIN 43880
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 6 items
- walls closed with closing plates, closing plate set included
- order flanges separately

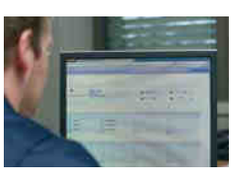




Please note:

Connection box for plug devices, push buttons or switches under accessories

Cover cutouts against direct contact with hazardous live parts



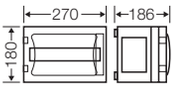
Editable labelling strips

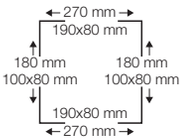
ENYSTAR

Circuit breaker boxes for the installation of DIN rail equipment up to 63 A
Operation and access also by unskilled persons

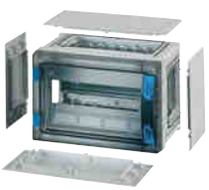
FP 1106

12 modules: 1 x 12 x 18 mm
without PE and N terminal
with removable DIN rail rack and earth connection

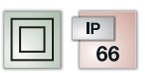




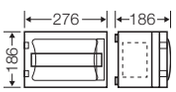
- 1-row
- box size 1
- order PE/N terminals separately
- with installation of a PE/N terminal the number of modules is reduced to 1 x 9 x 18 mm
- for installation of DIN rail equipment up to 63 A in accordance with DIN 43880
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 4 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately

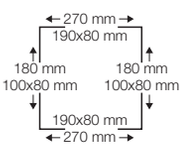


FP 1107



12 modules: 1 x 12 x 18 mm
without PE and N terminal
with closing plates for box walls
with removable DIN rail rack and earth connection





- 1-row
- box size 1
- order PE/N terminals separately
- with installation of a PE/N terminal the number of modules is reduced to 1 x 9 x 18 mm
- for installation of DIN rail equipment up to 63 A in accordance with DIN 43880
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 4 items
- walls closed with closing plates, closing plate set included
- order flanges separately

Removable DIN rail rack for
e.g. earth connection (British standard)

ENYSTAR

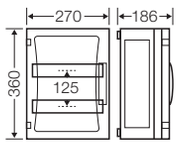
Circuit breaker boxes for the installation of DIN rail equipment up to 63 A

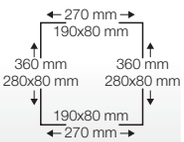
Operation and access also by unskilled persons

FP 1216

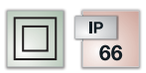
24 modules: 2 x 12 x 18 mm
without PE and N terminal
with removable DIN rail rack and earth connection

- 2-row
- box size 2
- order PE/N terminals separately
- for installation of DIN rail equipment up to 63 A in accordance with DIN 43880
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 4 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately



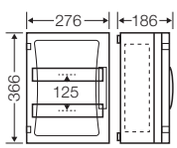


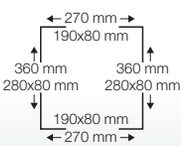
FP 1217



24 modules: 2 x 12 x 18 mm
without PE and N terminal
with closing plates for box walls
with removable DIN rail rack and earth connection

- 2-row
- box size 2
- order PE/N terminals separately
- for installation of DIN rail equipment up to 63 A in accordance with DIN 43880
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 4 items
- walls closed with closing plates, closing plate set included
- order flanges separately

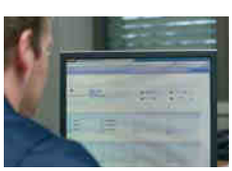




Please note:

Connection box for plug devices, push buttons or switches under accessories

Cover cutouts against direct contact with hazardous live parts



Editable labelling strips

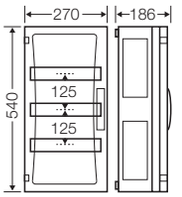
ENYSTAR

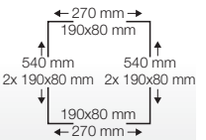
Circuit breaker boxes for the installation of DIN rail equipment up to 63 A
Operation and access also by unskilled persons

FP 1316

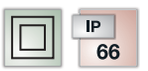
36 modules: 3 x 12 x 18 mm
without PE and N terminal
with removable DIN rail rack and earth connection

- 3-row
- box size 3
- order PE/N terminals separately
- for installation of DIN rail equipment up to 63 A in accordance with DIN 43880
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 6 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately



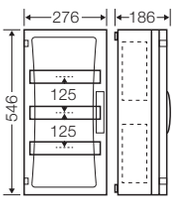


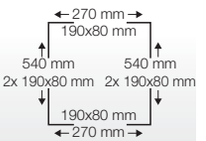
FP 1317



36 modules: 3 x 12 x 18 mm
without PE and N terminal
with closing plates for box walls
with removable DIN rail rack and earth connection

- 3-row
- box size 3
- order PE/N terminals separately
- for installation of DIN rail equipment up to 63 A in accordance with DIN 43880
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 6 items
- walls closed with closing plates, closing plate set included
- order flanges separately





Removable DIN rail rack for
e.g. earth connection (British standard)

ENYSTAR

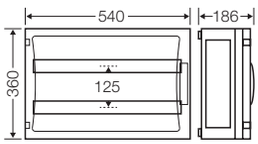
Circuit breaker boxes for the installation of DIN rail equipment up to 63 A

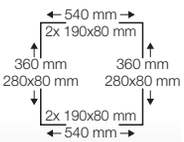
Operation and access also by unskilled persons

FP 1406

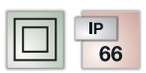
54 modules: 2 x 27 x 18 mm
without PE and N terminal
with removable DIN rail rack and earth connection

- 2-row
- box size 4
- order PE/N terminals separately
- for installation of DIN rail equipment up to 63 A in accordance with DIN 43880
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 6 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately



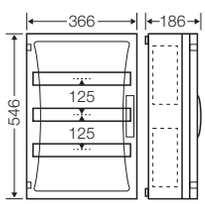


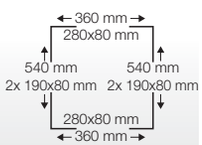
FP 1417



51 modules: 3 x 17 x 18 mm
without PE and N terminal
with closing plates for box walls
with removable DIN rail rack and earth connection

- 3-row
- box size 4
- order PE/N terminals separately
- for installation of DIN rail equipment up to 63 A in accordance with DIN 43880
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 6 items
- walls closed with closing plates, closing plate set included
- order flanges separately

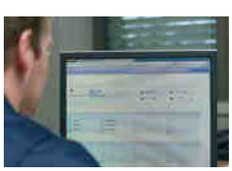




Please note:

Connection box for plug devices, push buttons or switches under accessories

Cover cutouts against direct contact with hazardous live parts



Editable labelling strips

ENYSTAR

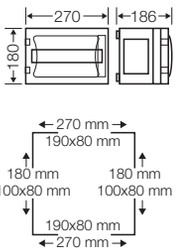
Circuit breaker boxes for the installation of DIN rail equipment up to 100 A

Operation also by unskilled persons

FP 1101

12 modules: 1 x 12 x 18 mm without PE and N terminal

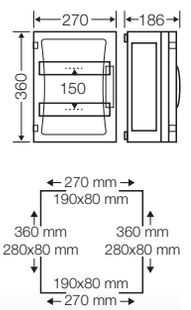
- 1-row
- box size 1
- for installation of DIN rail equipment up to 100 A in accordance with DIN 43 880
- use enclosure FP 1100 for N/PE terminals
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 4 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately



FP 1249

24 modules: 2 x 12 x 18 mm without PE and N terminal

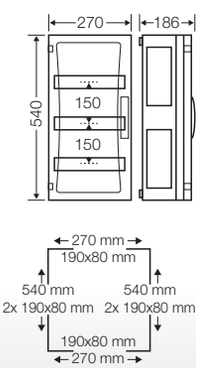
- 2-row
- box size 2
- for installation of DIN rail equipment up to 100 A in accordance with DIN 43 880
- use enclosure FP 1100 for N/PE terminals
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 4 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately



FP 1349

36 modules: 3 x 12 x 18 mm without PE and N terminal

- 3-row
- box size 3
- for installation of DIN rail equipment up to 100 A in accordance with DIN 43 880
- use enclosure FP 1100 for N/PE terminals
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 6 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately



ENYSTAR

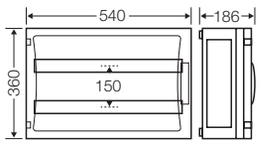
Circuit breaker boxes for the installation of DIN rail equipment up to 100 A

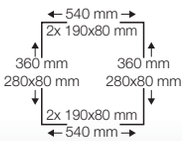
Operation also by unskilled persons

FP 1439

54 modules: 2 x 27 x 18 mm without PE and N terminal

- 2-row
- box size 4
- for installation of DIN rail equipment up to 100 A in accordance with DIN 43 880
- use enclosure FP 1100 for N/PE terminals
- with transparent door
- door locking with hand operation
- door locking sealable
- with blanking strips for unused DIN rail openings
- with labelling strips
- connector: 6 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately

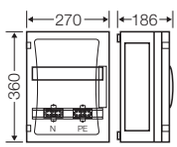


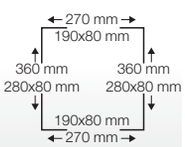


FP 1211

12 modules: 1 x 12 x 18 mm for miniature circuit breakers (MCB)

- 1-row
- box size 2
- with 1 DIN rail 216 mm wide (for installation depth of 72 mm)
- for installation of DIN rail equipment up to 100 A in accordance with DIN 43 880
- per PE/N 2 x 25 mm², 4 x 16 mm², Cu
- cover can be sealed
- with lockable blanking strips
- connector: 4 items
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately

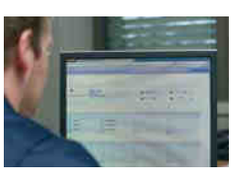




Please note:

Connection box for plug devices, push buttons or switches under accessories

Cover cutouts against direct contact with hazardous live parts



Editable labelling strips

ENYSTAR

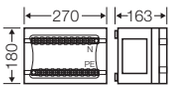
Circuit breaker boxes for the installation of DIN rail equipment up to 100 A

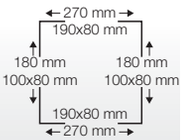
Operation also by unskilled persons

FP 1100

Terminal box
per PE/N 10 x 1.5-10 mm² sol / f,
11 x 2.5-16 mm² r / f, 1 x 16 mm² sol or
1 x 16-35 mm² f, Cu

- rated current: 125 A
- box size 1
- with opaque door
- door fastener with tool operation
- sealing device for door sealing order separately
- in orer to achieve protection class II and degree of protection IP 66, please order closing plate sets, single closing plates and flanges separately





Example: ENYSTAR distribution board

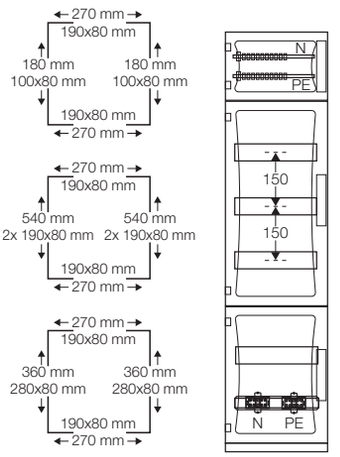
Incoming: 100 A
36 modules: 3 x 12 x 18 mm

Enclosure:

1 x FP 1349
1 x FP 1211
1 x FP 1100

Accessories:

2 x FP VP 18
4 x FP VP 27
2 x FP VP 36
1 x FP FM 263
1 x FP FM 225



ENYSTAR

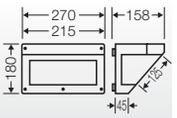
Accessories

Connection Box	264
Extension frames, DIN rails, spacer	265
Mounting plates for the installation of devices	266
Covers, sealing device for covers	267
Partition, blanking strips, spacer for DIN rail mounted device	268
PE / N terminals, main line branch terminals	269 - 271
Wall separators, closing plates	272 - 273
Metal inserts for closing plates	274
Flanges	275 - 276
Ventilation / pressure compensation	277 - 278
Canopy	279
Connectors, facility for sealing, conversion kit for door fastener, door lock, dust protection cover, external brackets, mounting profiles	280 - 281

FP CB 210

Connection Box

- for mounting on box walls (270 mm)
- hinged mounting area
- for the installation of devices that must be operated externally, such as plug devices, push buttons and switches



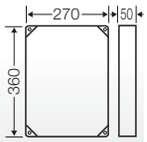
Application:

Connection box for plug devices, push buttons or switches under accessories

FP ZR 20

Extension frame for enclosure size 2

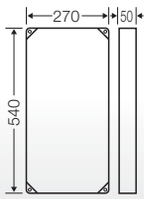
- for extension of the installation depth by 50 mm
- inclusive fixing material
- suitable for fixing the cover FP AP 20 in different installation depths



FP ZR 30

Extension frame for enclosures size 3

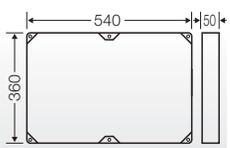
- for extension of the installation depth by 50 mm
- inclusive fixing material
- suitable for the admission of cover FP AP 30 in different installation depths

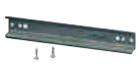


FP ZR 40

Extension frame for enclosure size 4

- for extension of the installation depth by 50 mm
- inclusive fixing material
- suitable for the admission of cover FP AP 40 in different nstallation depths





FP TS 27

DIN rail, length 216 mm

- in accordance with DIN EN 60715
- for ENYSTAR empty boxes sizes 1, 2 and 3
- for equipment or terminals with clip-on mounting
- with fixing screws

FP TS 36

DIN rail, length 306 mm

- in accordance with DIN EN 60715
- for ENYSTAR empty boxes sizes 2 and 4
- for equipment or terminals with clip-on mounting
- with fixing screws

FP TS 54

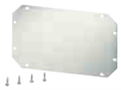
DIN rail, length 486 mm

- in accordance with DIN EN 60715
- for ENYSTAR empty boxes sizes 3 and 4
- for equipment or terminals with clip-on mounting
- with fixing screws

FP DS 02

Spacer height: 29.5 mm or 53.5 mm

- for spacing DIN rails ENYSTAR
- 2 pieces
- with fixing screws for fixing on bottoms
- To change height turn spacer by 90°.



FP MP 10

Mounting plate
W 216 x H 126 mm

- for ENYSTAR empty boxes sizes 1, 2 and 3
- material thickness 4 mm
- with fixing screws

FP MP 20

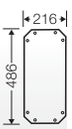
Mounting plate
W 216 x H 306 mm

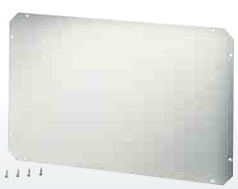
- for ENYSTAR empty boxes sizes 2, 3 and 4
- material thickness 4 mm
- with fixing screws

FP MP 30

Mounting plate
W 216 x H 486 mm

- for ENYSTAR empty boxes sizes 3 and 4
- material thickness 4 mm
- with fixing screws

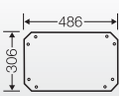




FP MP 40

Mounting plate
W 486 x H 306 mm

- for ENYSTAR empty boxes size 4
- material thickness 4 mm
- with fixing screws



FP BZ 13

Fixing screw
length 13 mm

- for assembling DIN rails or mounting plates at the base of the box
- for material thicknesses of 2.5 to 4 mm
- self-tapping
- galvanised

Application:

Device installation on mounting plates

ENYSTAR
Accessories

FP AP 10

Cover without cut-outs
W 220 x H 130 mm

- for ENYSTAR enclosure size 1
- for retrofitting
- as protection cover or for installation of equipment

FP AP 20

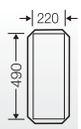
Cover without cut-outs
W 220 x H 310 mm

- for ENYSTAR enclosure size 2
- for retrofitting
- as protection cover or for installation of equipment

FP AP 30

Cover without cut-outs
W 220 x H 490 mm

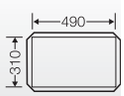
- for ENYSTAR enclosure size 3
- for retrofitting
- as protection cover or for installation of equipment



FP AP 40

Cover without cut-outs
W 490 x H 310 mm

- for ENYSTAR enclosure size 4
- for retrofitting
- as protection cover or for installation of equipment



FP PL 2

Sealing device for covers
not suitable for circuit-breaker boxes

- can be retrofitted
- 2 pieces
- with fixing screws

Application:

Device installation in covers

FP TW 18

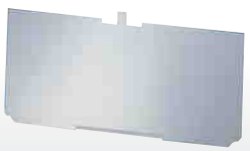
Partition
180 mm

- to push-in between enclosures

FP TW 27

Partition
270 mm

- to push-in between enclosures



FP TW 36

Partition
360 mm

- to push-in between enclosures
- except between two busbar boxes

AS 12

Blanking strip
12 modules

- 12 x 18 mm, divisible every 9 mm
- for the covering of spare equipment openings, for material thickness up to 3 mm

AS 18

Blanking strip
18 modules

- 18 X 18 mm, divisible every 9 mm
- for the covering of spare equipment openings, for material thickness up to 3 mm

DAE 12

Spacer

- for improvement in the heat dissipation of DIN rail mounted devices
- consisting of 12 items

FC PN 20

PE and N terminal
PE/N 2 x 25 mm², 8 x 4 mm², Cu each

- for installation on DIN rails in accordance with IEC 60715, top hat profile 35 mm
- for boxes with 1 x 12 modules (through terminal reduction to 9 modules)
- FIXCONNECT® plug-in technology, for terminal technology refer to index technical data
- current carrying capacity: 101 A

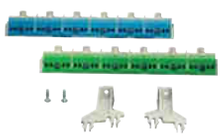
rated insulation voltage	U_i = 690 V a.c.

FP FC 24

PE and N terminal
per PE/N 3 x 25 mm², 12 x 4 mm², Cu

- for enclosures with 2 x 12 modules
- FIXCONNECT® plug-in technology, for terminal technology refer to index technical data
- N separable, for up to 2 different potentials
- with fastening material
- current carrying capacity: 75 A

rated insulation voltage	U_i = 690 V a.c.

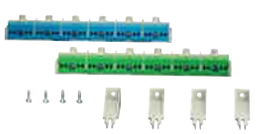


FP FC 36

PE and N terminal
per PE/N 6 x 25 mm², 24 x 4 mm², Cu

- for enclosures with 3 x 12 modules
- FIXCONNECT® plug-in technology, for terminal technology refer to index technical data
- N separable, up to 4 different potentials
- with fastening material
- current carrying capacity: 75 A

rated insulation voltage	U_i = 690 V a.c.

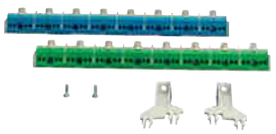


FP FC 54

PE and N terminal
per PE/N 6 x 25 mm², 24 x 4 mm², Cu

- for enclosures with 2 x 27 modules
- FIXCONNECT® plug-in technology, for terminal technology refer to index technical data
- N separable, up to 4 different potentials
- with fastening material
- current carrying capacity: 75 A

rated insulation voltage	U_i = 690 V a.c.



FP FC 51

PE and N terminal
per PE/N 8 x 25 mm², 32 x 4 mm², Cu

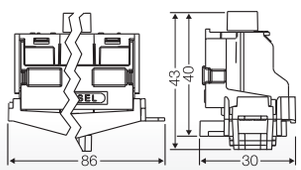
- for enclosures with 3 x 17 modules
- FIXCONNECT® plug-in technology, for terminal technology refer to index technical data
- N separable, up to 4 different potentials
- with fastening material
- current carrying capacity: 75 A

rated insulation voltage	U_i = 690 V a.c.

FC PE 10

PE terminal
2 x 25 mm², 8 x 4 mm², Cu

- for installation on DIN rails in accordance with IEC 60715, top hat profile 35 mm
- for boxes with 1 x 12 modules (through terminal reduction to 9 modules)
- FIXCONNECT® plug-in technology, for terminal technology refer to index technical data



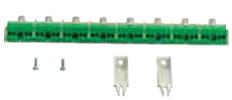
rated insulation voltage	U_i = 690 V a.c.

FP FC 054

PE terminal
6 x 25 mm², 24 x 4 mm², Cu

- for enclosures with 2 x 12 modules, 3 x 12 modules, 2 x 27 modules
- FIXCONNECT® plug-in technology, for terminal technology refer to index technical data
- with fastening material

rated insulation voltage	U_i = 690 V a.c.



FP FC 051

PE terminal
8 x 25 mm², 32 x 4 mm², Cu

- for enclosures with 3 x 17 modules
- FIXCONNECT® plug-in technology, for terminal technology refer to index technical data
- with fastening material

rated insulation voltage	U_i = 690 V a.c.

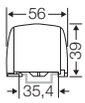
FC BS 5

FIXCONNECT labelling system
set with 5 pieces

- labelling system for FIXCONNECT® plug-in terminals, not for terminals 2x25 / 4x4 mm²
- for attaching of labelling strips or marking with felt tip pen

KKL 34

Main line branch terminal
Rated connecting capacity: 1.5-25 mm², Cu

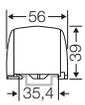


- as a connecting terminal
- for installation on DIN rails in accordance with IEC 60715, top hat profile 35 mm
- connections per terminal L1-L3: 4x
- connection: 1.5-16 mm² f* or 2.5-25mm², Cu, round conductor
  f* = with gas-tight end ferrule
- current carrying capacity: 80 A
- width: 61 mm

dismantling length	19 mm
tightening torque for terminal	2.5 Nm

KKL 48

Main line branch terminal
Rated connecting capacity: 1.5-25 mm², Cu

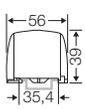


- as a connecting terminal
- for installation on DIN rails in accordance with IEC 60715, top hat profile 35 mm
- connections per terminal L1-L3, 4x
  connections per terminal N: 8x
- connection: 1.5-16 mm² f* or 2.5-25mm², Cu, round conductor
  f* = with gas-tight end ferrule
- current carrying capacity: 80 A
- width: 100 mm

dismantling length	19 mm
tightening torque for terminal	2.5 Nm

KKL 54

Main line branch terminal
Rated connecting capacity: 1.5-25 mm², Cu



- as a connecting terminal
- for installation on DIN rails in accordance with IEC 60715, top hat profile 35 mm
- connections per terminal L1-L3: 4x
  connections per terminal N: 4x
  connections per terminal PE: 4x
- connection: 1.5-16 mm² f* or 2.5-25mm², Cu, round conductor
  f* = with gas-tight end ferrule
- current carrying capacity: 80 A
- width: 100 mm

dismantling length	19 mm
tightening torque for terminal	2.5 Nm

FP WT 1

Wall separator

- for connecting enclosure walls of different sizes (refer to technical data)
- for insertion in bases of enclosures
- with 2 fixing elements

FP VP 18

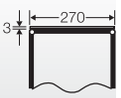
Closing plate
180 mm

- with 2 fixing elements
- without knockouts

FP VP 27

Closing plate
270 mm

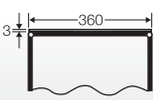
- with 2 fixing elements
- without knockouts



FP VP 36

Closing plate
360 mm

- with 2 fixing elements
- without knockouts



Application:

Closing of enclosure walls

ENYSTAR
Accessories

FP VS 10

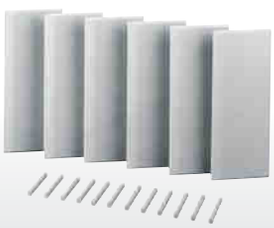
Closing plate set
box size 1

- 2 x for box wall 1 (180 mm) and 2 x for box wall 2 (270 mm)
- with 8 fixing elements
- without knockouts

FP VS 20

Closing plate set
box size 2

- 2 x for box wall 2 (270 mm) and 2 x for box wall 3 (360 mm)
- with 8 fixing elements
- without knockouts



FP VS 30

Closing plate set
box size 3

- 6x for box wall 2 (270 mm)
- with 12 fixing elements
- without knockouts

FP VS 40

Closing plate set
box size 4

- 4 x for box wall 2 (270 mm) and 2 x for box wall 3 (360 mm)
- with 12 fixing elements
- without knockouts

Application:

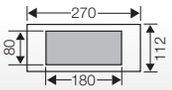
Closing of enclosure walls

FP VM 27

Metal insert for closing plates

- box size 2 (270 mm)
- for earthing of metal armoured cables
- without knockouts

mounting width	180 mm
mounting height	80 mm

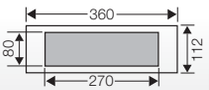


FP VM 36

Metal insert for closing plates

- for box wall 3 (360 mm)
- for earthing of metal armoured cables
- without knockouts

mounting width	270 mm
mounting height	80 mm



Application:

Metal insert for earthing of metal armoured cables

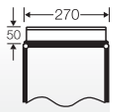
Earth connection according to Britsh Standard installation via built-in metal insert.

FP FG 200

Flange
without knockouts

- box size 2 (270 mm)
- attached enclosure connectors: 2 items

mounting width	240 mm
mounting height	92 mm

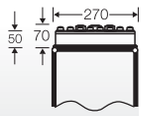


FP FG 222

IP 65

Flange
sealing range Ø 6-30 mm

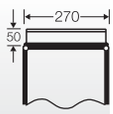
- sealing range: 17 x Ø 6-13 mm, 2 x Ø 9-17 mm, 2 x Ø 8-23 mm, 1 x Ø 11-30 mm
- box size 2 (270 mm)
- attached enclosure connectors: 2 items
- with integrated grommets for cable entry



FP FM 225

Flange
knockouts: 7 x M 16/25, 13 x M 20/25

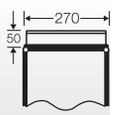
- box size 2 (270 mm)
- attached enclosure connectors: 2 items



FP FM 232

Flange
knockouts: 8 x M 25/32, 2 x M 25/32/40

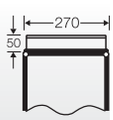
- box size 2 (270 mm)
- attached enclosure connectors: 2 items



FP FM 240

Flange
knockouts: 2 x M 25/32, 5 x M 25/32/40

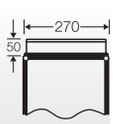
- box size 2 (270 mm)
- attached enclosure connectors: 2 items



FP FM 263

Flange
knockouts: 2 x M 20, 2 x M 25/32,
2 x M 32/40/50, 1 x M 40/50/63

- box size 2 (270 mm)
- attached enclosure connectors: 2 items

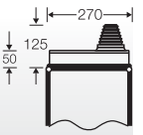


FP FG 272

Flange
sealing range: 1 x Ø 30-72 mm

- box size 2 (270 mm)
- attached enclosure connectors: 2 items

IP 65

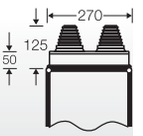


FP FG 273

Flange
sealing range: 2 x each Ø 30-72 mm

- box size 2 (270 mm)
- attached enclosure connectors: 2 items

IP 65



FP FG 282

Cable insert
sealing range: 2 x each Ø 30-72 mm

- divisible for cable insertion from the front
- box size 2 (270 mm)
- attached enclosure connectors: 2 items
- degree of protection IP 65 only with additional strain and pressure relief (e.g. FP ZE 272)

IP 65

FP ZE 272

Cable strain relief
for 2 cables with max. 60 mm external diameter

- box size 2 (270 mm)
- with fixing screws

FP GS 27

Box fin
for inserting cables across 2 boxes

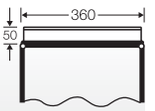
- removable
- for box walls 270 mm
- can be retrofitted

FP FG 300

Flange
without knockouts

- for box wall 3 (360 mm)
- attached enclosure connectors: 2 items

mounting width	330 mm
mounting height	92 mm

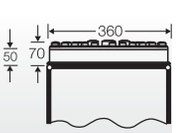


FP FG 331

Flange
sealing range Ø 6-30 mm

- sealing range: 22 x Ø 6-13 mm, 6 x Ø 9-17 mm, 2 x Ø 8-23 mm, 1 x Ø 11-30 mm
- for box wall 3 (360 mm)
- attached enclosure connectors: 2 items
- with integrated grommets for cable entry

IP 65



ENYSTAR
Accessories

FP BF 18

Ventilation flange
180 mm

IP 44

- for ventilation of ENYSTAR Distribution boards in the event of extremely high internal temperatures or a risk of water condensation
- for vertical installation on box walls
- with 2 fixing elements

FP BF 27

Ventilation flange
270 mm

IP 44

- for ventilation of ENYSTAR Distribution boards in the event of extremely high internal temperatures or a risk of water condensation
- for vertical installation on box walls
- with 2 fixing elements

FP BF 36

Ventilation flange
360 mm

IP 44

- for ventilation of ENYSTAR Distribution boards in the event of extremely high internal temperatures or a risk of water condensation
- for vertical installation on box walls
- with 2 fixing elements

BE 44

Ventilation insert

IP 44

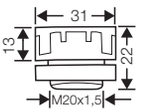
Application

Ventilation via ventilation insert

BM 20G

Pressure compensation element for M 20 knockouts

IP 54

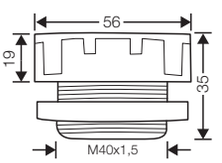


- for the reduction of condensation by pressure compensation in power distribution systems
- ISO thread M 20 x 1.5
- bore-hole: Ø 20.3 mm
- wall thickness up to 4 mm
- with counter nut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- In order not to exceed leakage limit of 0.07 bar with pressure compensation, one pressure compensation element BM 20G must be used per 28 litres (28000 cm³) of enclosure volume.
- Example: enclosure size 30 cm x 60 cm x 17 cm = 30600 cm³ = 30,6 litres. Number of necessary BM 20G (M32) = 2 piece.
- technical changes reserved
- Colour: grey, RAL 7035

BM 40G

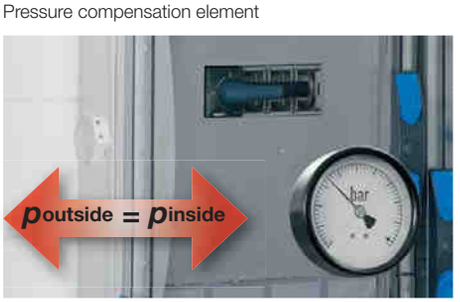
Pressure compensation element for M 40 knockouts

IP 54



- for the reduction of condensation by pressure compensation in power distribution systems
- ISO thread M 40 x 1.5
- bore-hole: Ø 40.3 mm
- wall thickness of up to 8 mm
- with counter nut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- In order not to exceed leakage limit of 0.07 bar with pressure compensation, one pressure compensation element BM 40G must be used per 122 litres (122000 cm³) of enclosure volume.
- Example: enclosure size 60 cm x 60 cm x 17 cm = 61200 cm³ = 61,2 litres. Number of necessary BM 40G (M40) = 1 piece.
- technical changes reserved
- Colour: grey, RAL 7035

Pressure compensation element

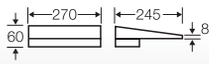


ENYSTAR
Canopy

FP DB 27

Canopy
for box wall 270 mm

- W 270 x D 245 mm
- attached enclosure connectors: 2 items

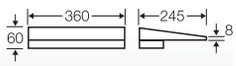


material	stainless steel powder-coated

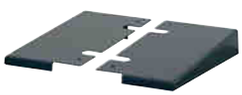
FP DB 36

Canopy
for box wall 300 mm

- W 360 x D 245 mm
- attached enclosure connectors: 2 items



material	stainless steel powder-coated



Mi DB 01

Canopy end plate

- for canopies FP DB xx and Mi DB xx

material	stainless steel powder-coated

Application:

Canopy

ENYSTAR
Accessories

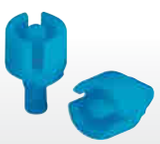
FP GV 10
Connector
- when converting existing installations
- for connection of enclosures or fixation of flanges
- set with 10 pieces

FP PL 3
Facility for sealing
- for door sealing
- can be retrofitted
- 2 pieces

FP TW 1
Tool operation
conversion kit from hand to tool operation
- can be retrofitted

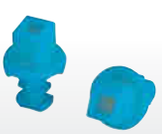
FP TS 1
Door lock
converting kit to key operation
- for subsequent installation in hand operated door locking system

FP TS 2
Spare key
- for door lock FP TS 1
- 2 pieces



FP TW 2
Tool key for double-bit
conversion kit to tool operation
- can be retrofitted

FP TW 3
Tool key for triangular lock, 8 mm
conversion kit to tool operation
- can be retrofitted



FP TW 4
Tool key for sqare lock, 8 mm
conversion kit to tool operation
- can be retrofitted

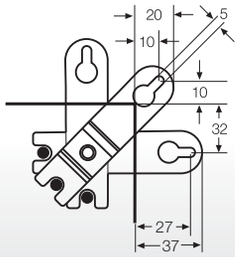
US 1
Multikey
- triangular 8 mm, square 8 mm, double-bit and slot

ENYSTAR
Accessories

FP AL 40

4 stainless steel external brackets

- for external fixing of enclosures

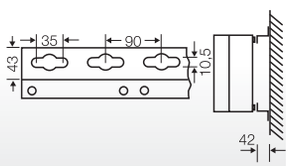


FP MS 1

Profile for wall mounting

- for ENYSTAR distribution board assemblies up to 810 x 1260 mm
- with 8 screws, washers and nuts for fastening of enclosures

length	1980 mm
material	sendzimir galvanised steel profile with structured powder coating



Varnishing pen RAL 7016

12 ml

ENYSTAR

Technical details

Operating and ambient conditions	283
Detail dimensions in mm	284 - 285
Rated power dissipation of empty boxes	286 - 287
Standards and regulations	288
Assembly	289 - 293
Wall mounting	294
Device installation, wiring	295 - 297

ENYSTAR

Technical details
Operating and ambient conditions

	Enclosures with door and closing plates Empty enclosures FP 0...	Circuit breaker boxes FP 1...
Application area	**Suitable for indoor installation and outdoor installation, protected against weather influences** However, pay attention to the climatic effects on the installed equipment, for example, high or low ambient temperatures or formation of condensed water see technical information	
Ambient temperature - Average value over 24 hours - Maximum value - Minimum value	 – + 70 °C – 25 °C	 + 35 °C + 40 °C – 5 °C The ambient temperature for enclosures with electrcal funtions (distribution boards) is reduced by the installed equipment technology!
Relative humidity - short-time	Adhere to the assembly instructions issued by the manufacturer.	50% at 40 °C 100% at 25 °C
Fire protection in the event of internal faults	Demands placed on electrical devices from standards and laws: Minimum requirements - Glow wire test in accordance with IEC 60 695-2-11: - 650 °C for boxes and cable glands - 850 °C for conducting components	
Burning behaviour - Glow wire test IEC 60 695-2-11 - UL Subject 94	 960 °C V-2 flame-retardant self-extinguishing	 960 °C V-2 flame-retardant self-extinguishing
Degree of protection against mechanical load	IK 08 (5 Joule)	IK 08 (5 Joule)
Toxic behaviour	halogen-free [1] silicone-free	halogen-free [1] silicone-free

[1] “Halogen-free” in accordance with IEC 60754-2 “Common test methods for cables - Determination of the amount of halogen acid gas”.

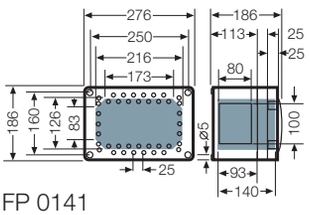
For material properties see technical data.

ENYSTAR

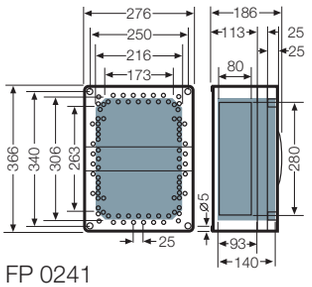
Technical details
Detail dimensions in mm

= usable installation space with mounted cable glands

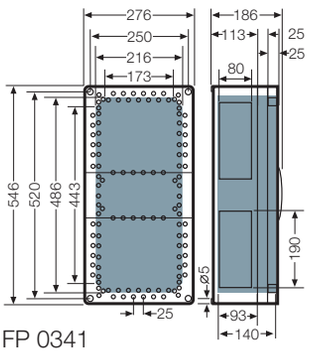
ENYSTAR distribution boards with door lockings for hand operation and closing plates



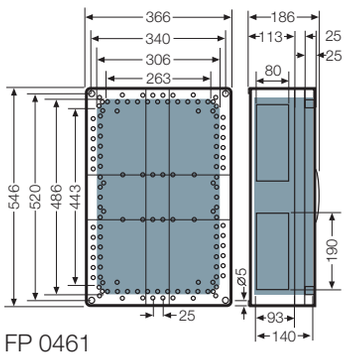
FP 0141
FP 0151



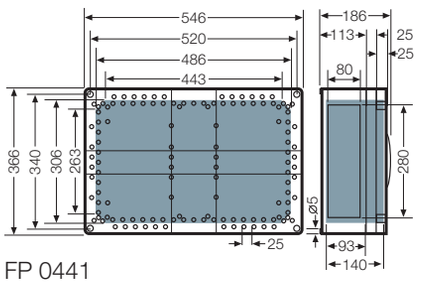
FP 0241
FP 0251



FP 0341
FP 0351

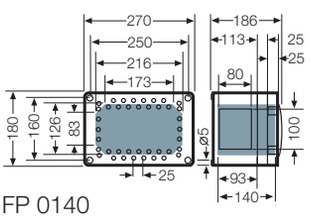


FP 0461
FP 0471

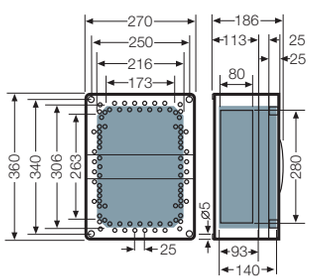


FP 0441
FP 0451

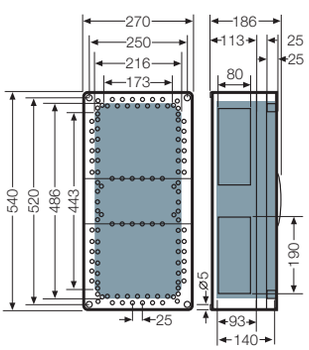
ENYSTAR distribution boards with door lockings for hand operation



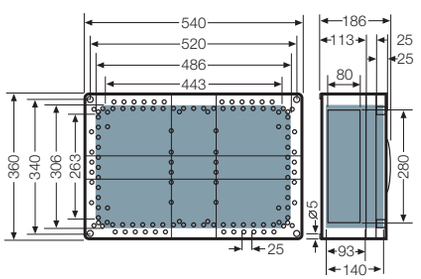
FP 0140
FP 0150



FP 0240
FP 0250

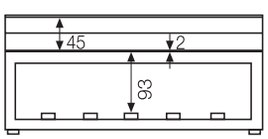


FP 0340
FP 0350



FP 0440
FP 0450

Mounting depth for device installation in covers

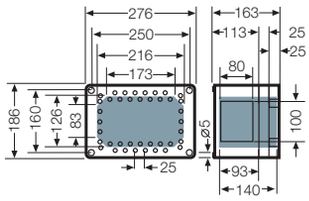


ENYSTAR

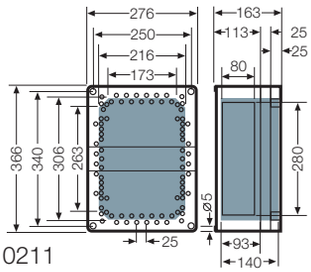
Technical details
Detail dimensions in mm

= usable installation space with mounted cable glands

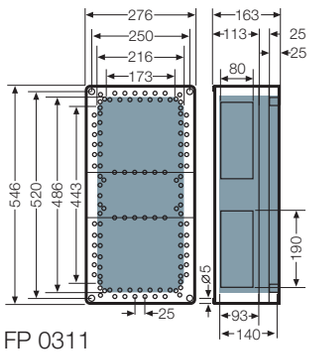
ENYSTAR distribution boards with door lockings for tool-operation and closing plates



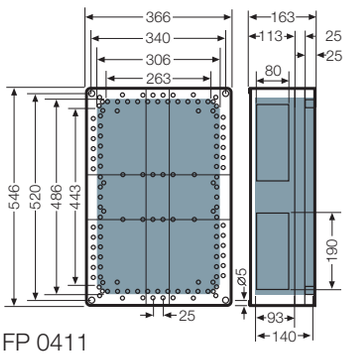
FP 0101
FP 0121



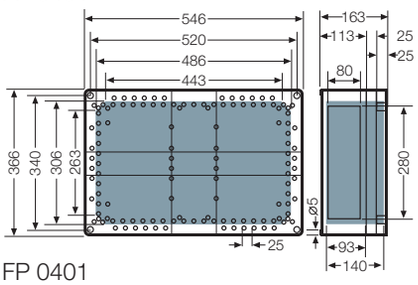
FP 0211
FP 0231



FP 0311
FP 0331

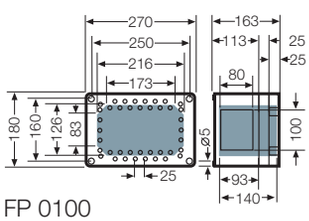


FP 0411
FP 0431

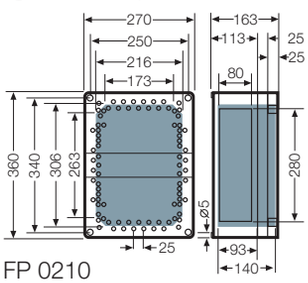


FP 0401
FP 0421

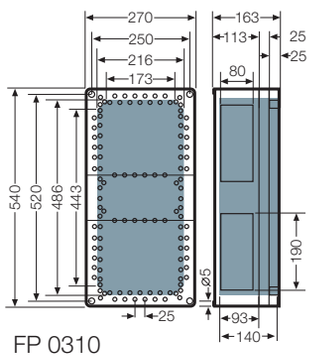
ENYSTAR distribution boards with door lockings for tool-operation



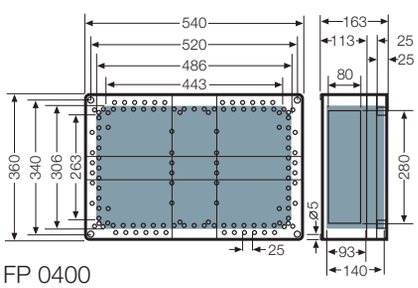
FP 0100
FP 0120



FP 0210
FP 0230

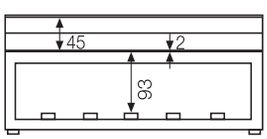


FP 0310
FP 0330



FP 0400
FP 0420

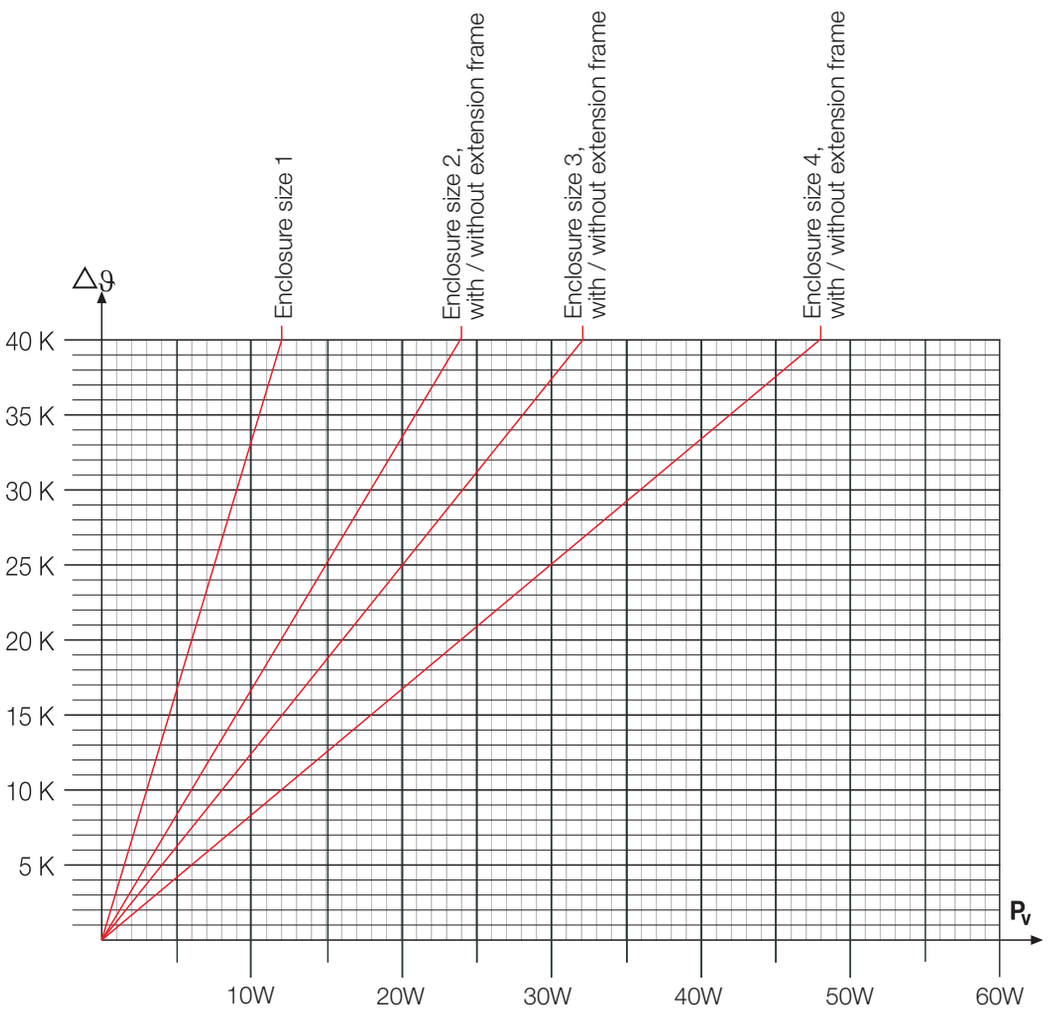
Mounting depth for device installation in covers



ENYSTAR

Technical details
Power dissipation of empty boxes

Temperature rise (Δϑ) with ENYSTAR enclosures by power dissipation of electrical devices



ENYSTAR distribution boards Enclosure size	Dimensions (WxH) in mm	Rated power dissipation P_{ab} in watts per kelvin assembled enclosures
Enclosure size 1	270 x 180	0.3
Enclosure size 2 with / without extension frame	270 x 360	0.6
Enclosure size 3 with / without extension frame	270 x 540	0.8
Enclosure size 4 with / without extension frame	540 x 360	1.2

ENYSTAR

Technical details
Power dissipation of empty boxes

Note!

The maximally permissible operating temperature inside the enclosures (ϑ_{imax}) is determined by:

1st Maximally permissible ambient temperature of the installed electrical devices (please consider data of the equipment manufacturers)

2nd Category temperature of the internal wiring and the inserted cables

3rd Temperatur resistance of the enclosure materials and the cable entries etc.

Example: calculation of the maximum rated power dissipation (P_V)	
maximally permissible operating temperature inside the enclosure(s) (ϑ_{imax}):	e.g. 55 °C
ambient temperature of the enclosure(s) (ϑ_U):	25 °C
maximally permissible heating up inside the enclosure:	$\Delta\vartheta = \vartheta_{imax} - \vartheta_U$ = 55 °C - 25 °C = 30 K
maximum permissible power dissipation of the installed equipment inclusive wiring (P_V) in accordance with diagram: enclosure size 3 (540 x 270 x 163 mm):	
enclosures in assemblies:	P_V = 24 W

Example: calculation of the operating temperature inside the enclosure (ϑ_i)	
ambient temperature of the enclosure(s) (ϑ_U):	25 °C
rated power dissipation of the installed electrical equipment (P_V):	24 W
heating up inside the enclosures in accordance with diagram over:	$\Delta\vartheta$
enclosure size 3 (540 x 270 x 163 mm):	
assembled enclosures:	$\Delta\vartheta$ = 30 K; $\vartheta_i = \vartheta_U + \Delta\vartheta$ = 25 °C + 30 K = 55 °C

ENYSTAR distribution boards comply with the requirements of the IEC 61439-3

Distribution boards assembled and wired according to manufacturer data without essential deviations from the original type or system.

To meet these requirements for Hensel ENYSTAR Distribution boards, the following must be noted:

1. The distribution boards must consist of the verified enclosures documented in this list.

2. The wiring of the equipment must be carried out with the cross-sections and conductor types indicated in Table “Rating of insulated conductors in switchgear assemblies”, Index Technics.

3. Once the distribution board is completed, a routine test must be carried out in accordance with this standard.

4. The test must be certified with a test report.

5. The assembly must be provided with a manufacturer’s identification mark.
   Compliance with important data such as
   - limit of temperature rise
   - dielectric strength
   - IP degrees of protection
   - creepage distances and clearances
   is verified for this system.

Standards and regulations

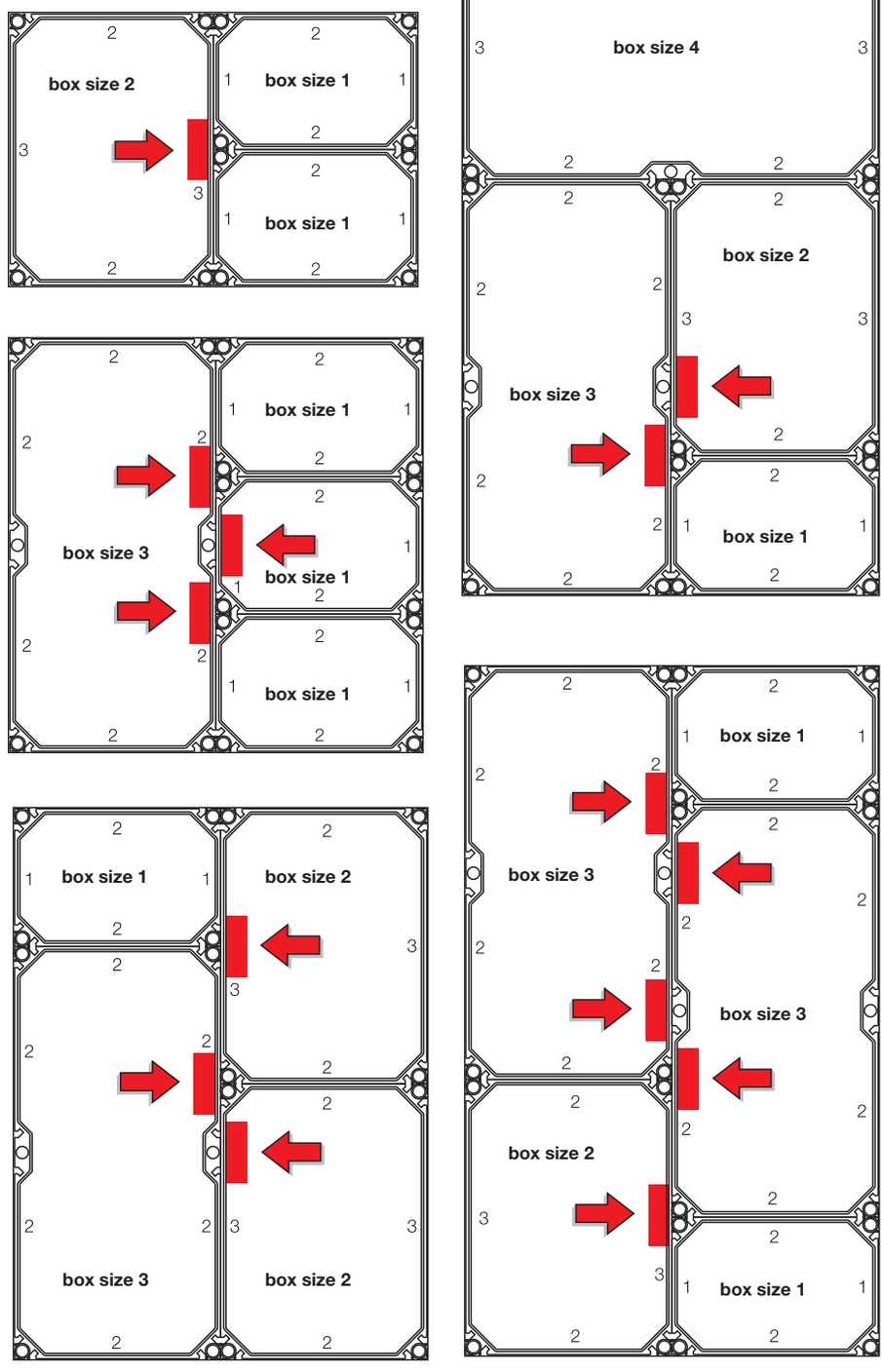
- IEC 61439-3
  ... low-voltage switchgear and controlgear assemblies intended to be in places where unskilled persons have access to their use - distribution boards
- IEC 60999, connecting devices
  Safety requirements for screw-type and screwless-type clamping units for electrical copper conductors
- DIN EN 50262
  Metric threaded cable glands for electrical installations
- DIN 43880
  Built-in equipment for electrical installations; overall dimensions and related mounting dimensions
- IEC 60529 / DIN VDE 0470 Part 1
  Degrees of protection provided by enclosures (IP-Code)

ENYSTAR

Technical details
Assembly of enclosures

Combination of enclosures with connectors and wall separators

At this point a wall separator is necessary for the enclosure combination.



Fast assembly and mounting

All necessary gaskets are integral part of the enclosures. The enclosures are interconnected among themselves by easily pushing-in of connectors. No tools are necessary.

Connectors are attached to the enclosures in sufficient number. For reconstruction or extensions of existing distribution boards connectors FP GV 10 (set consists of 10 pieces) can be supplemented.

The connection of enclosures is not only co-ordinated with enclosures of the same size.
By means of wall separators also different sized enclosures can be combined.

Wall separators provide for high rigidity and tightness at the connection points of the enclosures, degree of protection IP 66.

ENYSTAR

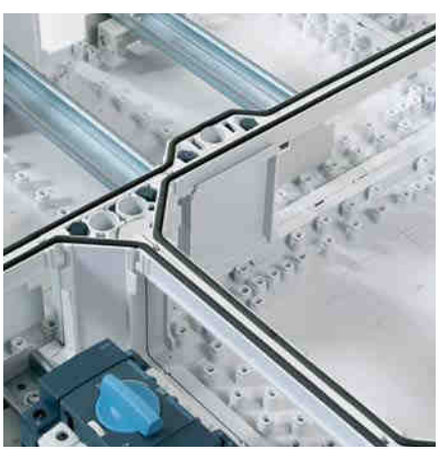
Technical details
Assembly of enclosures, wall separators

Connection of enclosures

Assemble enclosues by push-ing-in enclosed connectors.

Inserting wall separators

Use wall separators to connect different sized enclosure walls.

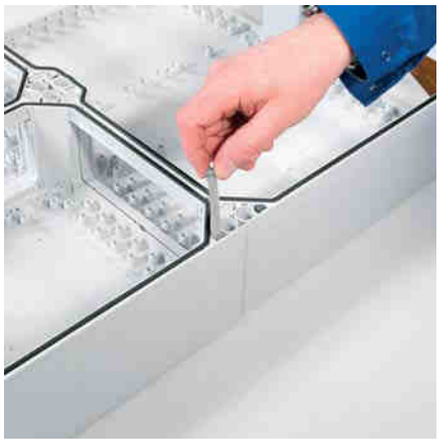


ENYSTAR

Technical details
Assembly: closing plates, flanges, cable insert

Closing walls via closing plates

Insert closing plates into openings of outer walls of the distribution board and fix them with enclosure connectors.



Cable entry - opening knockouts in flanges

Knock out the appropriate cable entries within flanges with screwdriver.

Cable glands

Insert cable gland into the appropriate knockout and fasten with lock nut.

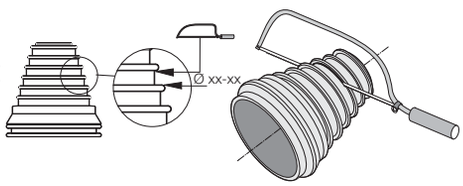
Closing of enclosure walls with flanges for cable entry

Insert flanges for cable entry into open outer walls of the distribution board and fix them with enclosure connectors.

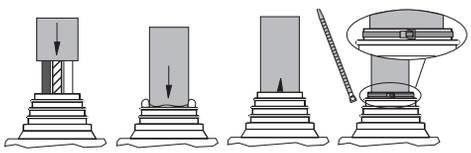
A wide range of flanges for the cable entry is available.

Installation of cable inserts
Saw the box fin.
Afterwards the cable insert is mounted and fixed via enclosure connectors and the rubber entries can be inserted.

Adjust stepped grommet on the cable diameter.



Insert cable and fix it with the cable ties.



Insert the cable into the box from the front.

Box fin
provides an easier wiring across two boxes.

Saw out fin in box wall.

Insert box fin and fix via fixing wedges.

Installation of extension frame
Fix attachments for extension frame in base of enclosure. Place extension frame on base of enclosure and screw it.

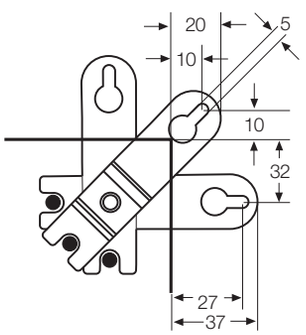
Support for protection cover is adjustable in height.

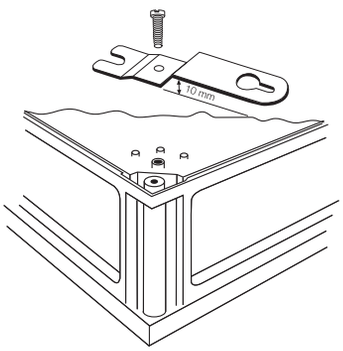
Click protection cover into place depending on the height of the electric devices (height adjustable).

FP ZR ..
Extension frame
for extension of the installation depth by 50 mm

External brackets made from stainless steel
for external box fixing

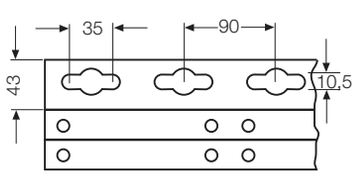
FP AL 40 (4 pieces)

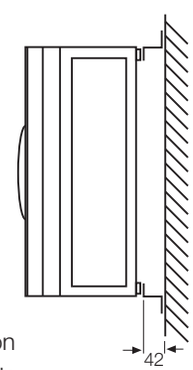




Mounting profile
for wall-mounting of ENYSTAR distribution boards, steel profile,
length 1980 mm
FP MS 1

Fixing matrix of mounting profile





Note:
Please fix mounting profile in vertical position as possible in order to give occation to cable routing behind the assembly.

For cutting to the required length fix mounting profile for example with a clamp to a desk.

Transport
Regarding transportation it is recommendable to protect the assembly against deflection. For that please screw the assembly to a solid timber.

Device installation on mounting plates or DIN rails

Fix installation devices on mounting plate via self-threading screws.

Using screws for fixing mounting plates onto bottom of boxes.

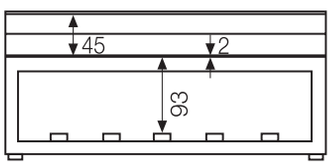
Mount DIN-rails right away on the bottom of bases or via spacers in heights of 29.5 mm or 53.5 mm.

Device installation into covers

Pre-drill the cut-outs at the corners and saw them out of the cover.

Use a piercing saw with coarse toothed saw blade for plastics.
Install device.

Snap cover into door frame from the rear.
Afterwards, screw door-frame with door and cover onto base of enclosure.



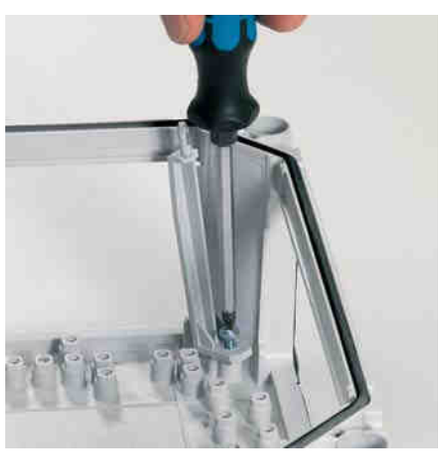
Installation depth for equipment installation in covers

Sealing

For installation in all enclosures except circuit breaker boxes.

Sealing device is screwed on enclosure bottom.

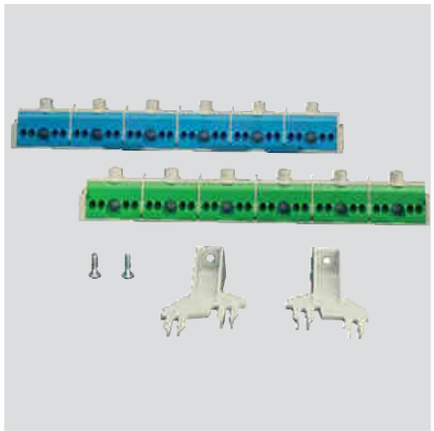
Open pre-moulded opening for sealing device (drill Ø 5 mm) and screw the cover with frame.

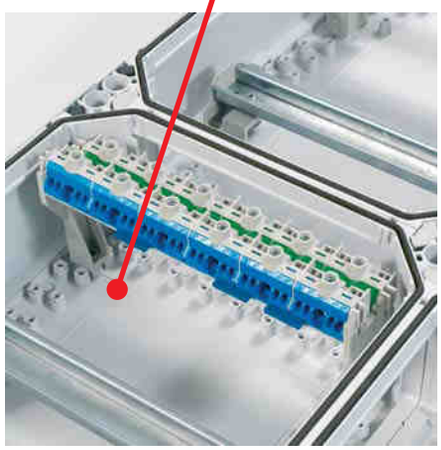


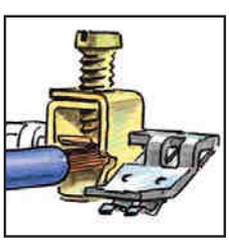
Then screw the frame with door and cover onto base of enclosure.
Seal the cover.

ENYSTAR

Wiring
PE and N terminals





Clamping unit	Corresponding cross-sections/copper				
	max. number	from - to max.		max. number	from - to max.
Screw-type terminal 25 mm²					
	1 1 1 3 3 4 4	25 mm², s 16 mm², s 10 mm², sol 6 mm², sol 4 mm², sol 2.5 mm², sol 1.5 mm², sol	} Tested as connecting terminal for several conductors of the same cross-sections for using in one circuit	1 1 1 1 1 1 1	25 mm², f 16 mm², f 10 mm², f 6 mm², f 4 mm², f 2.5 mm², f 1.5 mm², f
Plug-in terminal 4 mm² 	1	1.5 - 4 mm², sol		1	1.5 - 4 mm², f Without end ferrule; clamping unit has to be opened with a tool when conductor is inserted

Current carrying capacity of the connecting device: 75 A
All terminals are secured against self loosening.


wöhner
wöhner

Mi Power distribution boards up to 630 A

in accordance with IEC 61439-2

- **combinable enclosure system**
- **degree of protection IP 65**
- **made from polycarbonat**
- **protection class II, ⧈**

IEC 61439-2:
Interface characteristics of an assembly and
changes facing manufacturer‘s of an assembly (Panel builder) 300 - 301

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Circuit breaker boxes
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12 - 48 modules with hinged flaps, with PE and N terminals 326
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Further technical information can be found on the Internet
www.hensel-electric.de -> Products

Standard-conforming rating according to IEC 61439-2

The new IEC 61439 - the standard for the construction of switchgear assemblies - brings changes that affect the planning of a switchgear assembly. In addition, new tasks and responsibilities are awaiting the manufacturer of a switchgear assembly.

Decisive for the optimal functioning of a switchgear assembly under operating conditions is the correct rating of the interface characteristics of the assembly. For this purpose, the assembly is considered as **BLACK-BOX** with four interface characteristics which shall ensure compatibility with the ratings of the circuits to which it is connected and the installation conditions and shall be declared by the assembly manufacturer using the criteria identified below.

Assembly considered as BLACK BOX with the four interface characteristics according to IEC 61439-2

Installation and ambient conditions

- For the protected outdoor installation
- Degree of protection IP 65
- Combinable enclosure system, extendable in all directions
- 6 enclosure sizes in a grid of 150 mm
- EMC compliant busbar system
- Wall-mounting or floor-standing

Operation and maintainance

- Electrical functions intended to be operated by electrotechnical skilled or unskilled persons
- Protection class II up to a rated current of 630 A
- Flexible by standardised and tested kits
- Spacious connection areas

BLACK BOX
with 4 interfaces

Mi Power Distribution Board (PSC)

Combinable enclosure system, insulation-enclosed, total insulated, degree of protection IP 65, for the assembly of power switchgear and controlgear assemblies (PSC) up to 630 A in accordance with IEC 61439-2.

The requirements for all installed electrical functions within the assembly have been proved compliance with the applicable requirements of IEC 61439-2.

I_{nc} and RDF must be specified in the documentation.

Connection to the electrical network

- Electric circuit / final circuit
- Circuit-breaker up to 630 A
- Switch disconnector up to 630 A
- Fuse switch disconnector up to 630 A
- Bus-mounted fuse base up to 63 A
- Connecton with cable from above / from below
- Connection: conductors from copper / aluminium
- Optional connection of CEE sockets according to EN 60309 and sockets with earthing contact

Circuits and consumers

- Rated voltage U_n = 690 V a.c. / 1000 V d.c.
- Rated current I_N up to 630 A
- Circuit-breaker up to 630 A
- Switch disconnector up to 630 A
- Fuse switch disconnector up to 630 A
- 5-conductor system
- Connecton with cable from above / from below

Changes facing the manufacturer of a switchgear assembly (Panel builder)

IEC 61439 - the standard for the assembly of switchgear assemblies and distribution boards - determines the safety requirements for electrical equipment for the compliance of protection objectives for people and facilities. Requirements for products are more clearly defined and a new terminology is introduced.

BLACK BOX Specification

The designer specifies a switchgear assembly by defining the interface parameters as BLACK BOX.
Based on these interface specifications the manufacturer of a switchgear assembly has to rate and define the structure of the switchgear assembly.

Product presentation in media changed significantly

The standard has an effect as well on the documentation of products. Additional information, such as the rated current of circuits and the number of circuits, are now listed for each product as they are now required by designers and manufacturers for the construction of switchgear assemblies.

The international catalogue presents Mi empty and circuit breaker boxes.

Further enclosures with electrical functions for the assembly of ENYSTAR distribution boards up to 250 A, for example, with built-in busbars, circuit breakers, etc., see at: www.hensel-electric.de

For design and assembly according IEC 61439 / EN 61439 with ENYSTAR Distribution Boards up to 250 A please refer to the guide at www.hensel-elctric.de/61439.

The guide to design and assemble in accordance with EN 61439 for ENYSTAR distribution boards up to 250 A and Mi Power distribution boards up to 630 A can be downloaded:

www.hensel-electric.de/en

ENYGUIDE

Planning tool Configurator ENYGUIDE at www.enyguide.de

Free planning software ENYGUIDE: allows the quick and easy configuration of distribution boards.

- Dimensional drawings and parts lists are automatically created by ENYGUIDE.
- Representation of the distribution board as a detailed 3D-image or a 2D-drawing.
- Various view planes show the equipment, covers and doors.
- ENYGUIDE determines the necessary accessories such as the number of wall separators independently.
- No time-consuming program installation is needed.

www.enyguide.de

Mi Power distribution boards up to 630 A

combinable enclosure system, insulation-enclosed, total insulated, degree of protection IP 65, for the assembly of power switchgear and controlgear assembly (PSC) up to 630 A in accordance with IEC 61439 Part 2

- Boxes can also be used as a single box
- Degree of protection IP 65: dust-proof and jet water-proof
- Application area: Mi enclosures are suitable for for the protected outdoor installation - harsh environment and /or outdoor.

Material:

- Polycarbonate
- Burning behaviour: Glow wire test in accordance with IEC 60 695-2-11, self-extinguishing, flame-retardant
- UV-resistance in accordance with IEC 61439-1, Clause 10.2.4: The material is examined for UV resistance.
- Toxic behaviour: silicone- and halogen-free
- Chemical resistance:
  resistant against acid, lye, benzene and mineral oil

Power distribution board (PSC) in accordance with IEC 61439-2

Safe in dust, dirt, moisture and in harsh industrial atmosphere

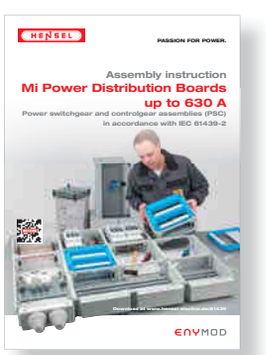
Dust- and waterresistant:
Mi Distribution Boards can withstand the highest loads

Assembly of Mi Distribution boards in accordance with IEC 61439-2

Enclosure system:

- Enclosures with electrical functions with standardized kits up to 630 A
- Covers made from thermoplastic
- Covers with protected, editable and captive labelling strips
- Cover plates for mounted electrical equipment
- Mounting plates or DIN rails for installation device
- Large wall openings enable the wiring within the distribution boards
- Cable entry via metric knockouts in all box walls, via flanges with metric knockouts or elastic membranes or cable inserts with up to 74 mm cable diameter
- Wall fixing right away in the boxes, via external brackets or via mounting profiles
- Facility for lead seal and locking
- Hinges for lids and heavy-duty hinge joints for operating installation device within a large area
- Connection Box for the instalation of devices that must be operated externally, such as plugs, pushbuttons and switches
- Mi empty boxes and single empty boxes conform to the RoHS Directive 2011/65/EC

Assembly instruction
Please request or download information:
www.hensel-electric.de/en -> Downloads



Dependent on the system

Electrical parameters

Electrical parameters

rated voltage: max. 690 V a.c.
rated insulation voltage: 690 V a.c., 1000 V d.c.
rated current: max. 630 A
rated short-time withstand current: max. 21 kA

The design values are possibly reduced by the installed equipment technology, please refer to technical data of the product or index technical data.

System properties

Environmental conditions

Ambient temperature
- **for distribution boards**
  in accordance with IEC 61439:
  -5 °C up to 35 °C, max. + 40 °C
  Relative humidity: 50% at 40 °C, 100% at 25 °C
- **for empty enclosures:** - 25 °C up to + 70 °C
  The climatic influences and effects on the equipment are to be considered, see technical details / operating and ambient conditions

Application area

The enclosures are suitable for outdoor installation, protected against weather influences.
However, pay attentionto the climatic effects on the installed equipment, rsee operating and ambient conditions in index technical data.

Insulation

insulated enclosures
(protection class II) ⧈

Impact strength

degree of protection against mechanical load IK 08 (5 Joule) in accordance with IEC 62262

Protection against foreign solid objects and direct contact

dust-proof
degree of protection IP **6**5

Protection against ingress of water with harmful effects

protected against water
degree of protection IP 6**5**

Single enclosures without any flanges and components mounted in the lid have degree of protection IP 6**6**

Dependent on material

Material properties: polycarbonate

Burning behaviour

glow wire test 960 °C
in accordance with
IEC 60695-2-11
flame-retardant, self-extinguishing

UV resistance

UV resistance according to IEC 61439-1, Section 10.2.4: the material is examined for UV resistance

Chemical resistance

resistance against
acid 10% and
alkaline 10%,
petrol and mineral oil

Toxic behaviour

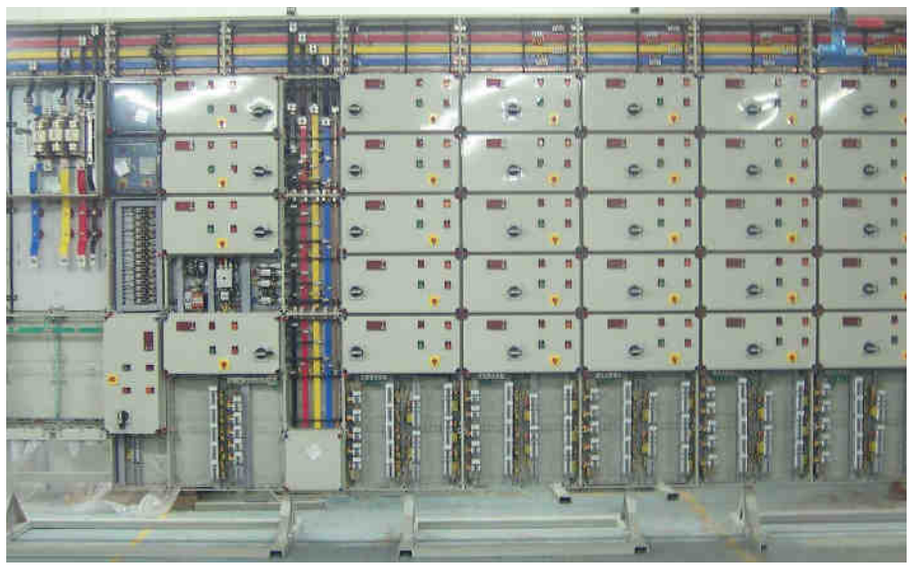
silicone- and halogen-free

Tested and certified by ASTA

Key benefits

Material	Thermoplastic material
Corrosion-proof	yes
Degree of protection	IP 65 (dust proof, water proof)
Protection against mechanical impact	no lasting deformations, elastic
Weight	”light“
Subsequent handling (such as openings)	”easy“
Transparent lids	standard offer
Operating area	partial opening range via lids of individual enclosures
Adaptability to location	by arrangement of modular enclosures
Combinability / Expandability	in all directions by combinable enclosures including electrical functions
Availability in the market	immediately with standard modules and accessories

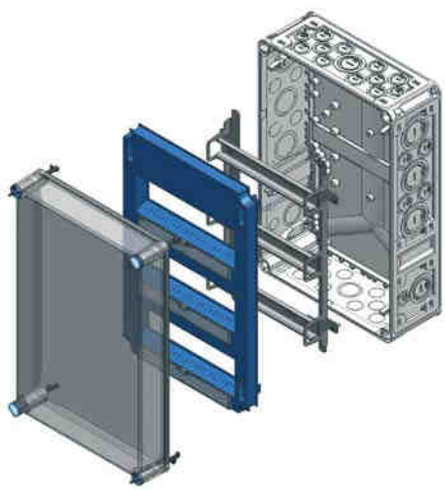
Suitable also for typical devices or the installation of armoured cables with earth connections



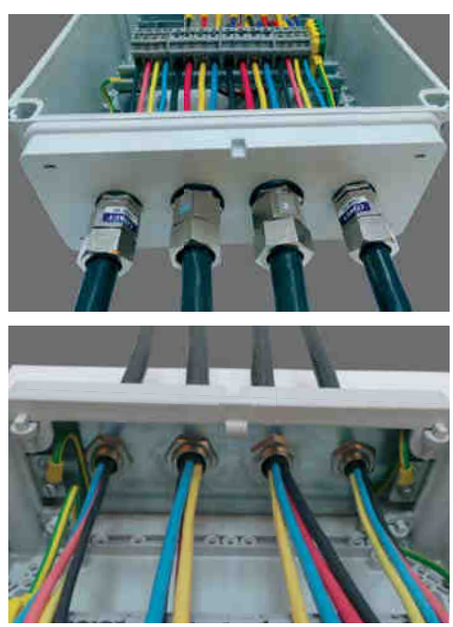
Application:
Motor Control Centre based on Mi System
This Motor Control Centre installed in a big paper mill consists of 33 feeders ranging from 2.2 kW to 50 kW including complete wiring with main incomer of 630 A.

Application:
Removable DIN rail rack for integrated earth bounding in each Mi Circuit breaker box.

Cable entry for armoured cables via metal glands for earth connection according to British Standards.



Integrated earth bounding in each circuit breaker box



Cable entry for armoured cables via metal glands

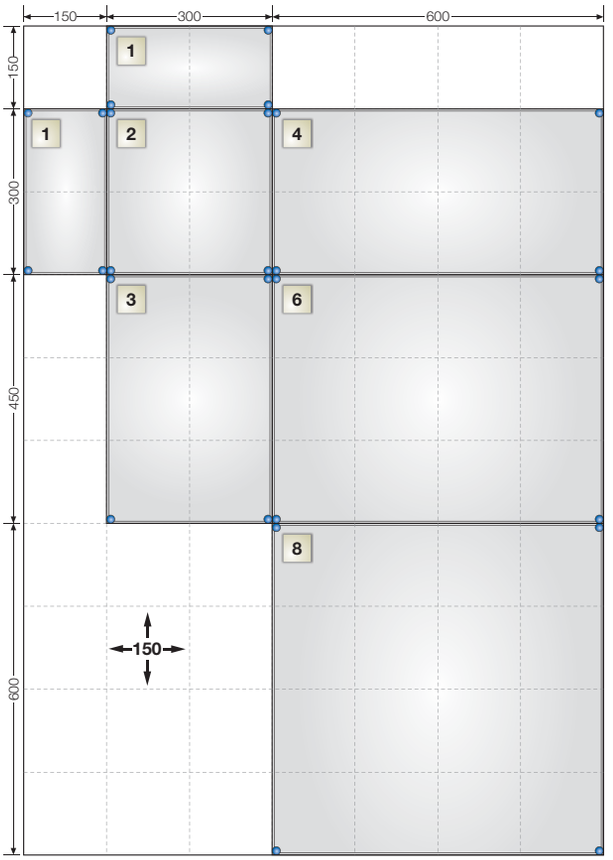
Combinable and extendable in all directions

Application examples

Mi Distribution boards

- modular enclosure system in grid of 150 mm
- 5 kapslingsstorlekar: 150 x 300 mm, 300 x 300 mm, 450 x 300 mm, 600 x 300 mm, 600 x 450 mm eller 600 x 600 mm
- for the assembly of power switchgear and controlgear assemblies (PSC) up to 630 A
- Enclosures can be used as well as single boxes.

The **modular design** in a basic grid of 150 mm allows free design of the outer form. The enclosures can be combined in all directions. Obstacle easily circumvented.



Different enclosure depths allow the installation of equipment of different heights (Fig. 1).

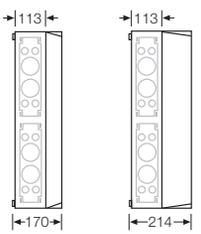


figure 1

With an extension frame the depth of the enclosure sizes 4 and 8 can be extended by 85 mm (Fig. 2).

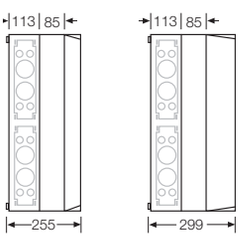
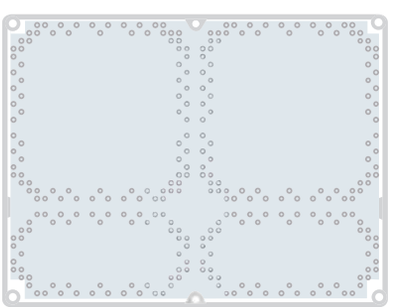


figure 2

Enclosure size 6 (600x450 mm)
Due to an enlarged terminal compartment directly in the housing, some electrical functions can be installed more economical.
An additional enclosure for wiring is not necessary.



Combinable distribution boards with door

Empty enclosures

Empty enclosures with hinged lid

Circuit breaker box

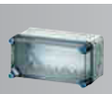
Mi enclosures can be assembled to distribution boards.

Emty enclosures for the installation of electrical equipment via mounting plates or DIN rails

Example:
Mi hinges for lids enable to operate installation device within a large area

Example:
Locking option with triangle prevents unauthorized access

Empty enclosures
transparent or opaque lids



Mi 0100
built-in dimensions
275x125x146 mm

Mi 0101
built-in dimensions
275x125x146 mm

Mi 0200
built-in dimensions
275x275x146 mm

Mi 0201
built-in dimensions
275x275x146 mm

Mi 0210
built-in dimensions
275x275x191 mm

Mi 0211
built-in dimensions
275x275x191 mm

Mi 0220
built-in dimensions
275x275x115 mm
hinged lid

Mi 0221
built-in dimensions
275x275x115 mm
hinged lid

Mi 0300
built-in dimensions
275x425x146 mm

Mi 0301
built-in dimensions
275x425x146 mm

Mi 0310
built-in dimensions
275x425x191 mm

Mi 0311
built-in dimensions
275x425x191 mm

Mi 0400
built-in dimensions
275x575x146 mm

Mi 0401
built-in dimensions
275x575x146 mm

Mi 0410
built-in dimensions
275x575x191 mm

Mi 0411
built-in dimensions
275x575x191 mm

Mi 0600
built-in dimensions
575x425x146 mm

Mi 0601
built-in dimensions
575x425x146 mm

Mi 0800
built-in dimensions
575x575x146 mm

Mi 0801
built-in dimensions
575x575x146 mm

Empty boxes for the installation of different electrical devices either directly over attachments in the base of the enclosures or on DIN rails or mounting plates.

Empty enclosures
hinged transparent or opaque lids

Mi 9100
built-in dimensions
122x272x146 mm,
hinged lid

Mi 9101
built-in dimensions
122x272x146 mm,
hinged lid

Mi 9200
built-in dimensions
275x275x146 mm,
hinged lid

Mi 9201
built-in dimensions
275x275x146 mm,
hinged lid

Mi 9210
built-in dimensions
275x275x191 mm,
hinged lid

Mi 9211
built-in dimensions
275x275x191 mm,
hinged lid

Mi 9300
built-in dimensions
275x425x146 mm,
hinged lid

Mi 9301
built-in dimensions
275x425x146 mm,
hinged lid

Mi 9310
built-in dimensions
275x425x191 mm,
hinged lid

Mi 9311
built-in dimensions
275x425x191 mm,
hinged lid

Mi 9400
built-in dimensions
275x575x146 mm,
hinged lid

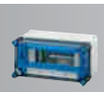
Mi 9401
built-in dimensions
275x575x146 mm,
hinged lid

Mi 9410
built-in dimensions
275x575x191 mm,
hinged lid

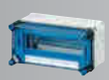
Mi 9411
built-in dimensions
275x575x191 mm,
hinged lid

Empty boxes with hinged lids applicable as single empty box for he installation of device via DIN rails or mounting plates. The lid keeps permanently connected to the box. Built-in devices can be easily operated and for example measurements conveniently carried out with both hands.

Circuit breaker boxes
with or without PE/N



Mi 1109
1x9x18 mm,
PE+N



Mi 1112
1x12x18 mm,
PE+N

Mi 1115
1x12x18 mm
without PE+N

Mi 1224
2x12x18 mm,
PE+N

Mi 1225
2x12x18 mm
without PE+N

Mi 1220
2x12x18 mm,
PE+N,
Scharnierdeckel

Mi 1226
2x12x18 mm
without PE+N,
hinged lid

Mi 1336
3x12x18 mm,
PE+N

Mi 1335
3x12x18 mm
without PE+N

Mi 1448
4x12x18 mm,
PE+N

Mi 1440
3x12x18 mm,
1 DIN rail,
without PE+N

Mi 1456 *
2x28x18 mm,
PE+N

Mi 1455 *
2x28x18 mm
without PE+N

Mi 1684 *
2x28x18 mm and
2x12x18 mm
PE+N

Mi 1683 *
2x28x18 mm and
2x12x18 mm
without PE+N

Mi 1884 *
3x28x18 mm,
PE+N

Mi 1885 *
3x28x18 mm
without PE+N

Mi 1111
1x12x18 mm,
PE+N,
1 hinged lid

Mi 1117
1x12x18 mm,
without PE+N,
1 hinged flap

Mi 1222
2x12x18 mm,
PE+N,
2 hinged flaps

Mi 1227
2x12x18 mm,
without PE+N,
2 hinged flaps

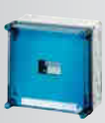
Mi 1333
3x12x18 mm,
PE+N,
3 hinged flaps

Mi 1337
3x12x18 mm,
without PE+N,
3 hinged flaps

Mi 1444
4x12x18 mm,
PE+N,
4 hinged flaps

Mi 1445
4x12x18 mm,
without PE+N,
4 hinged flaps

Mi 1443
3x12x18 mm,
1 DIN rail,
without PE+N,
3 hinged flaps



Mi 1281
for miniature
circuit breakers
1x6x18 mm,
PEN

Circuit breaker boxes
removable DIN rail rack and earth connection

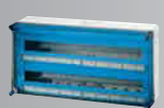
Mi 1118 *
1x12x18 mm,
without PE+N

Mi 1228 *
2x12x18 mm,
without PE+N

Mi 1221 *
2x12x18 mm,
without PE+N
with hinged lid

Mi 1338 *
3x12x18 mm,
without PE+N

Mi 1446 *
4x12x18 mm,
without PE+N



Mi 1455 *
2x28x18 mm,
without PE+N

Mi 1686 *
2x28x18 mm and
2x12x18 mm

Mi 1885 *
3x28x18 mm,
without PE+N

Mi 1119 *
1x12x18 mm,
without PE+N,
1 hinged flap

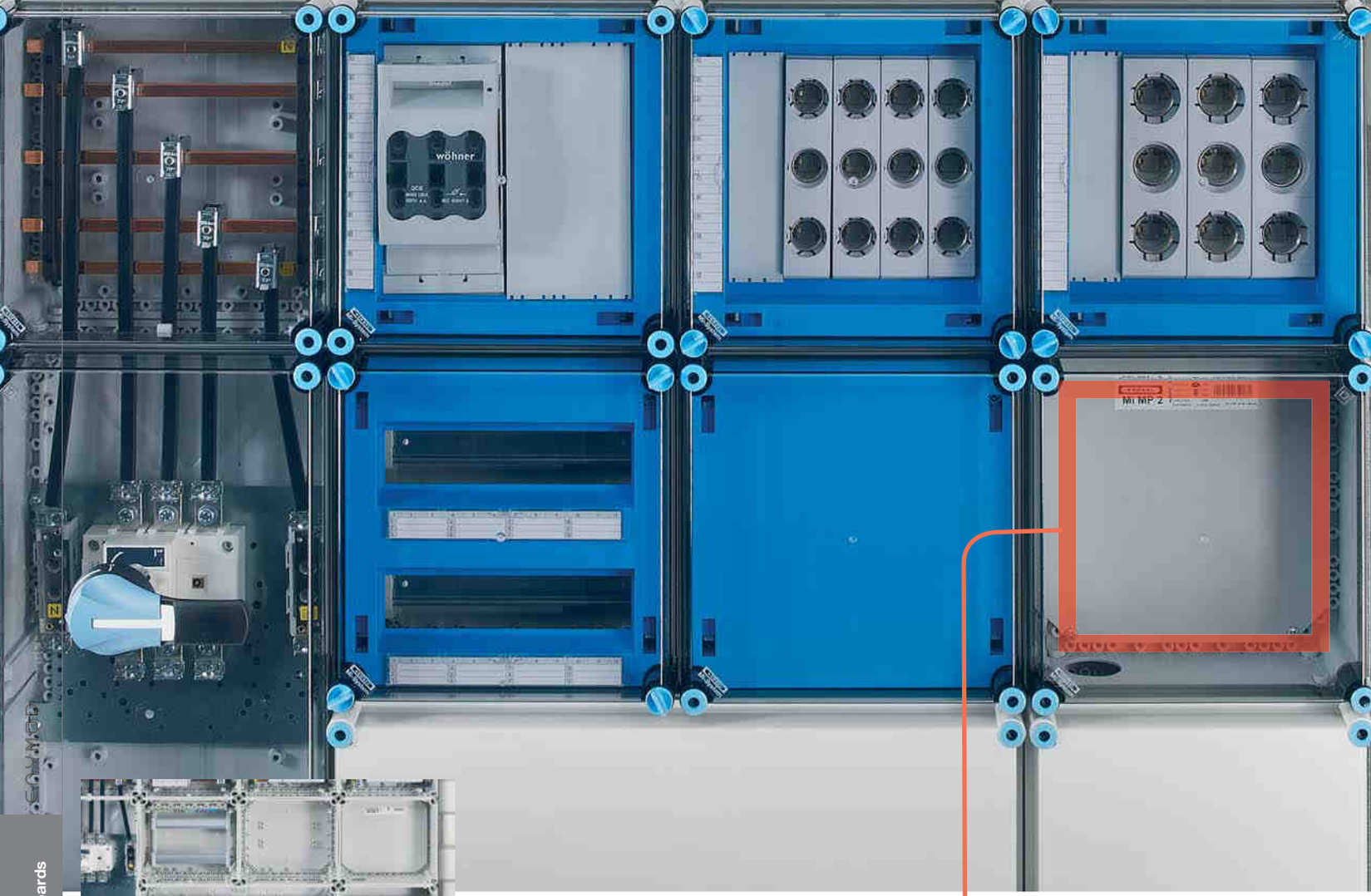
Mi 1229 *
2x12x18 mm,
without PE+N,
2 hinged flaps

Mi 1339 *
3x12x18 mm,
without PE+N,
3 hinged flaps

Mi 1449 *
4x12x18 mm,
without PE+N,
4 hinged flaps

* With removable DIN rail rack or earth connection

Circuit breaker boxes for the installation of DIN rail equipment in accordance with DIN 43880 from 9 to 84 modules.
Unused DIN rail openings in covers are stripped with attached blanking strips.



Mi Distribution Boards

Empty boxes

for the assembly of power distribution boards (PSC) up to 630 A in accordance with IEC 61430-2

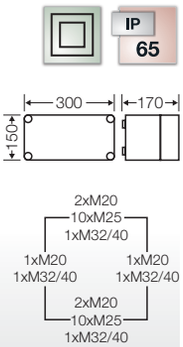
- Transparent or opaque enclosure lids
- Empty enclosure with hinged lid, trilaterally combinable
- Device installation either on mounting plates or DIN rails
- Installation depths extendable by using lids of different heights or extension frames
- Enclosures can also be used as single boxes
- Protection class II, ⧈
- Degree of protection: IP 65
- Material: PC (polycarbonate)
- Colour: grey, RAL 7035

Mi Distribution Boards
Empty boxes with transparent lid

Mi 0100

Built-in dimensions W 275 x H 125 x D 150 mm

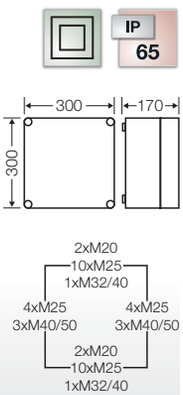
- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- box size 1
- please order DIN rails, mounting plates or covers additionally
- with transparent lid
- lid fasteners for tool operation



Mi 0200

Built-in dimensions W 275 x H 275 x D 150 mm

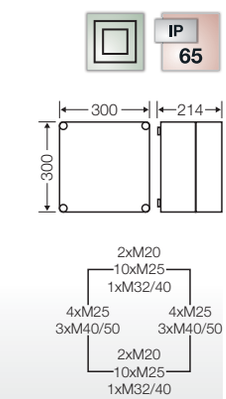
- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- box size 2
- please order DIN rails, mounting plates or covers additionally
- with transparent lid
- lid fasteners for tool operation



Mi 0210

Built-in dimensions W 275 x H 275 x D 195 mm

- max. installation depth with built-in mounting plate 191 mm, with built-in DIN rail 180 mm
- box size 2
- please order DIN rails, mounting plates or covers additionally
- with transparent lid
- lid fasteners for tool operation



Please note:

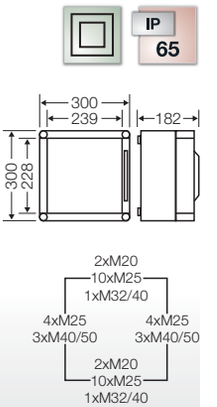
Terminals for incoming/ outgoing cables under accessories

Covers for protection of installation device, see accessories

Mi 0220

Built-in dimensions W 275 x H 275 x D 119 mm

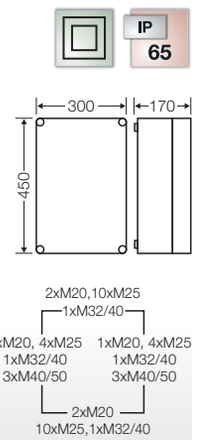
- max. installation depth with built-in mounting plate 115 mm, with built-in DIN rail 104 mm
- box size 2
- please order DIN rails, mounting plates or covers additionally
- with hinged lid for built-in equipment with protection cover which must be operated
- with transparent lid
- lid fasteners for tool operation



Mi 0300

Built-in dimensions W 275 x H 425 x D 150 mm

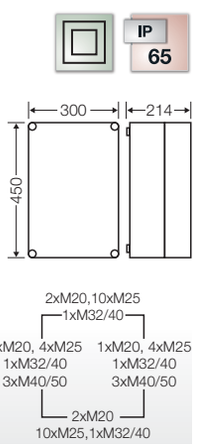
- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- box size 3
- please order DIN rails, mounting plates or covers additionally
- with transparent lid
- lid fasteners for tool operation



Mi 0310

Built-in dimensions W 275 x H 425 x D 195 mm

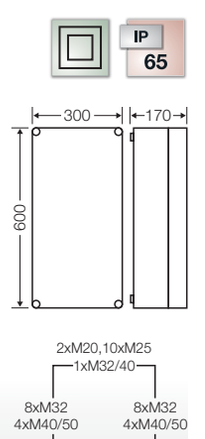
- max. installation depth with built-in mounting plate 191 mm, with built-in DIN rail 180 mm
- box size 3
- please order DIN rails, mounting plates or covers additionally
- with transparent lid
- lid fasteners for tool operation



Mi 0400

Built-in dimensions W 275 x H 575 x D 150 mm

- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- box size 4
- please order DIN rails, mounting plates or covers additionally
- with transparent lid
- lid fasteners for tool operation

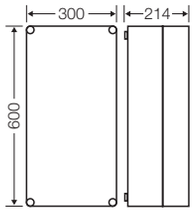


Mi Distribution Boards
Empty boxes with transparent lid

Mi 0410

Built-in dimensions W 275 x H 575 x D 195 mm

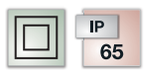
- max. installation depth with built-in mounting plate 191 mm, with built-in DIN rail 180 mm
- box size 4
- please order DIN rails, mounting plates or covers additionally
- with transparent lid
- lid fasteners for tool operation

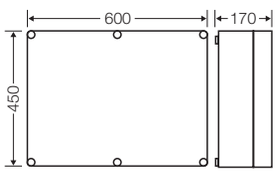


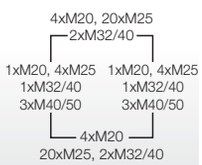
Mi 0600

built-in dimensions W 575 x H 425 x D 150 mm

- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- box size 6
- please order DIN rails, mounting plates or covers additionally
- with transparent lid
- lid fasteners for tool operation



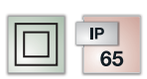


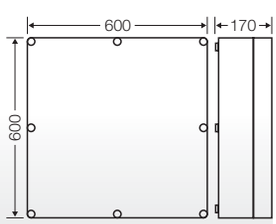


Mi 0800

Built-in dimensions W 575 x H 575 x D 150 mm

- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- box size 8
- please order DIN rails, mounting plates or covers additionally
- cable entry only possible via flange
- with transparent lid
- lid fasteners for tool operation





Please note:

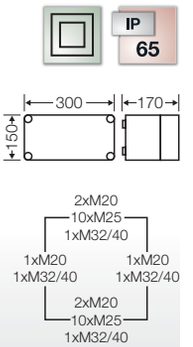
Terminals for incoming/ outgoing cables under accessories

Covers for protection of installation device, see accessories

Mi 0101

Built-in dimensions W 275 x H 125 x D 150 mm

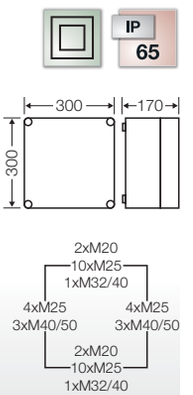
- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- box size 1
- please order DIN rails, mounting plates or covers additionally
- with opaque lid
- lid fasteners for tool operation



Mi 0201

Built-in dimensions W 275 x H 275 x D 150 mm

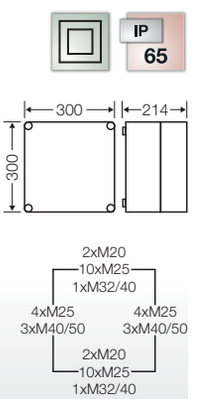
- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- box size 2
- please order DIN rails, mounting plates or covers additionally
- with opaque lid
- lid fasteners for tool operation



Mi 0211

Built-in dimensions W 275 x H 275 x D 195 mm

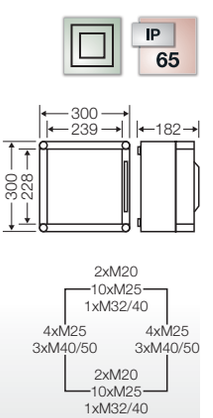
- max. installation depth with built-in mounting plate 191 mm, with built-in DIN rail 180 mm
- box size 2
- please order DIN rails, mounting plates or covers additionally
- with opaque lid
- lid fasteners for tool operation



Mi 0221

Built-in dimensions W 275 x H 275 x D 119 mm

- max. installation depth with built-in mounting plate 115 mm, with built-in DIN rail 104 mm
- box size 2
- please order DIN rails, mounting plates or covers additionally
- with hinged lid for built-in equipment with protection cover which must be operated
- with opaque lid
- lid fasteners for tool operation

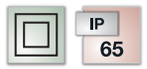


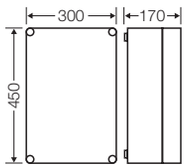
Mi Distribution Boards
Empty boxes with opaque lid

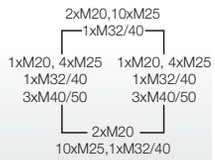
Mi 0301

Built-in dimensions W 275 x H 425 x D 150 mm

- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- box size 3
- please order DIN rails, mounting plates or covers additionally
- with opaque lid
- lid fasteners for tool operation



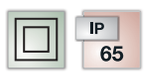


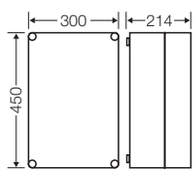


Mi 0311

Built-in dimensions W 275 x H 425 x D 195 mm

- max. installation depth with built-in mounting plate 191 mm, with built-in DIN rail 180 mm
- box size 3
- please order DIN rails, mounting plates or covers additionally
- with opaque lid
- lid fasteners for tool operation

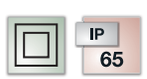


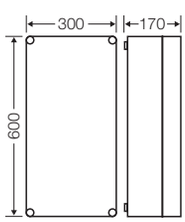


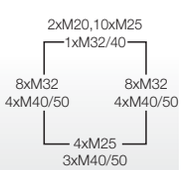
Mi 0401

Built-in dimensions W 275 x H 575 x D 150 mm

- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- box size 4
- please order DIN rails, mounting plates or covers additionally
- with opaque lid
- lid fasteners for tool operation







Please note:

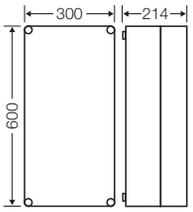
Terminals for incoming/ outgoing cables under accessories

Covers for protection of installation device, see accessories

Mi 0411

Built-in dimensions W 275 x H 575 x D 195 mm

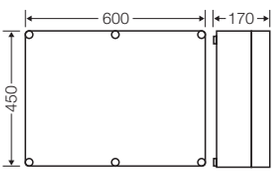
- max. installation depth with built-in mounting plate 191 mm, with built-in DIN rail 180 mm
- box size 4
- please order DIN rails, mounting plates or covers additionally
- with opaque lid
- lid fasteners for tool operation



Mi 0601

built-in dimensions W 575 x H 425 x D 150 mm

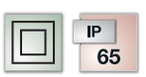
- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- box size 6
- please order DIN rails, mounting plates or covers additionally
- with opaque lid
- lid fasteners for tool operation

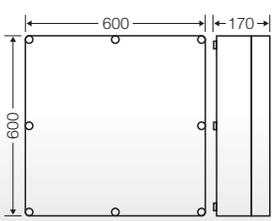


Mi 0801

Built-in dimensions W 575 x H 575 x D 150 mm

- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- box size 8
- please order DIN rails, mounting plates or covers additionally
- cable entry only possible via flange
- with opaque lid
- lid fasteners for tool operation



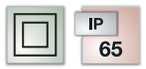


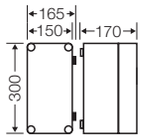
Mi Distribution Boards
Empty boxes
with hinged, transparent lid

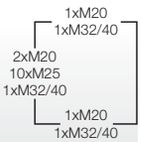
Mi 9100

Built-in dimensions W 125 x H 275 x D 150 mm

- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- box size 1
- please order DIN rails, mounting plates or covers additionally
- 3 walls with metric knockouts for cable entry and assembly
- trilaterally combinable
- lid hinges attached
- with transparent, hinged lid
- lid fasteners for tool operation



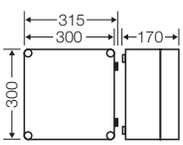


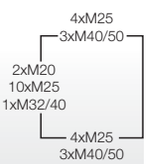


Mi 9200

Built-in dimensions W 275 x H 275 x D 150 mm

- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- box size 2
- please order DIN rails, mounting plates or covers additionally
- trilaterally combinable
- 3 walls with metric knockouts for cable entry and assembly
- lid hinges attached
- with transparent, hinged lid
- lid fasteners for tool operation

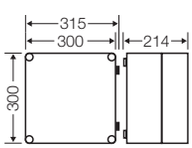


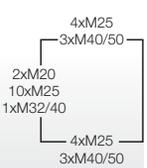


Mi 9210

Built-in dimensions W 275 x H 275 x D 195 mm

- max. installation depth with built-in mounting plate 191 mm, with built-in DIN rail 180 mm
- box size 2
- please order DIN rails, mounting plates or covers additionally
- trilaterally combinable
- 3 walls with metric knockouts for cable entry and assembly
- lid hinges attached
- with transparent, hinged lid
- lid fasteners for tool operation





Please note:

Terminals for incoming/ outgoing cables under accessories

Covers for protection of installation device, see accessories

Empty enclosures with hinged lids

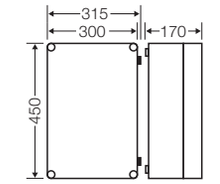
Mi Distribution Boards

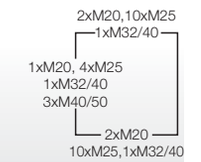
Empty boxes
with hinged, transparent lid

Mi 9300

Built-in dimensions W 275 x H 425 x D 150 mm

- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- box size 3
- please order DIN rails, mounting plates or covers additionally
- trilaterally combinable
- 3 walls with metric knockouts for cable entry and assembly
- lid hinges attached
- with transparent, hinged lid
- lid fasteners for tool operation

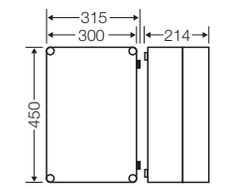


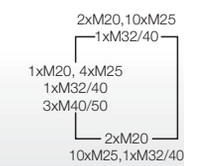


Mi 9310

Built-in dimensions W 275 x H 425 x D 195 mm

- max. installation depth with built-in mounting plate 191 mm, with built-in DIN rail 180 mm
- box size 3
- please order DIN rails, mounting plates or covers additionally
- trilaterally combinable
- 3 walls with metric knockouts for cable entry and assembly
- lid hinges attached
- with transparent, hinged lid
- lid fasteners for tool operation

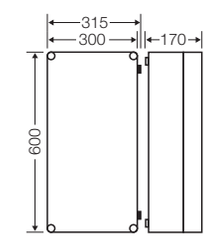


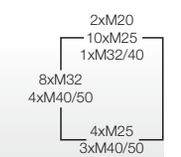


Mi 9400

Built-in dimensions W 275 x H 575 x D 150 mm

- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- box size 4
- please order DIN rails, mounting plates or covers additionally
- trilaterally combinable
- 3 walls with metric knockouts for cable entry and assembly
- lid hinges attached
- with transparent, hinged lid
- lid fasteners for tool operation



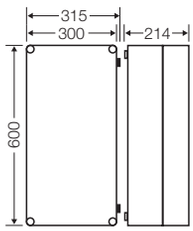


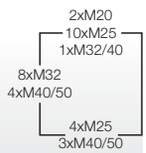
Mi Distribution Boards
Empty boxes
with hinged, transparent lid

Mi 9410

Built-in dimensions W 275 x H 575 x D 195 mm

- max. installation depth with built-in mounting plate 191 mm, with built-in DIN rail 180 mm
- box size 4
- please order DIN rails, mounting plates or covers additionally
- trilaterally combinable
- 3 walls with metric knockouts for cable entry and assembly
- lid hinges attached
- with transparent, hinged lid
- lid fasteners for tool operation





Please note:

Terminals for incoming/ outgoing cables under accessories

Covers for protection of installation device, see accessories

Empty enclosures with hinged lids

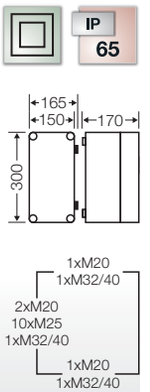
Mi Distribution Boards

Empty boxes
with hinged, opaque lid

Mi 9101

Built-in dimensions W 125 x H 275 x D 150 mm

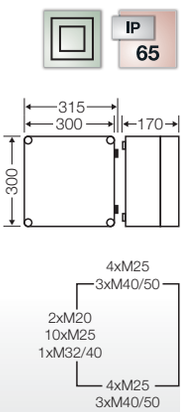
- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- box size 1
- please order DIN rails, mounting plates or covers additionally
- trilaterally combinable
- 3 walls with metric knockouts for cable entry and assembly
- lid hinges attached
- with opaque, hinged lid
- lid fasteners for tool operation



Mi 9201

Built-in dimensions W 275 x H 275 x D 150 mm

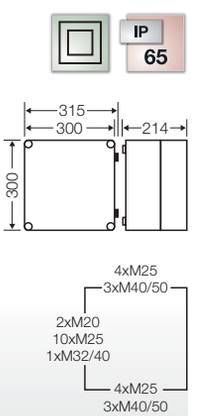
- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- box size 2
- please order DIN rails, mounting plates or covers additionally
- trilaterally combinable
- 3 walls with metric knockouts for cable entry and assembly
- lid hinges attached
- with opaque, hinged lid
- lid fasteners for tool operation



Mi 9211

Built-in dimensions W 275 x H 275 x D 195 mm

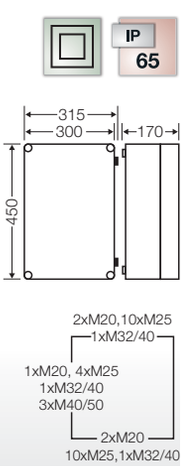
- max. installation depth with built-in mounting plate 191 mm, with built-in DIN rail 180 mm
- box size 2
- please order DIN rails, mounting plates or covers additionally
- trilaterally combinable
- 3 walls with metric knockouts for cable entry and assembly
- lid hinges attached
- with opaque, hinged lid
- lid fasteners for tool operation



Mi 9301

Built-in dimensions W 275 x H 425 x D 150 mm

- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- box size 3
- please order DIN rails, mounting plates or covers additionally
- trilaterally combinable
- 3 walls with metric knockouts for cable entry and assembly
- lid hinges attached
- with opaque, hinged lid
- lid fasteners for tool operation

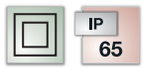


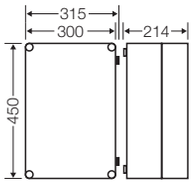
Mi Distribution Boards
Empty boxes
with hinged, opaque lid

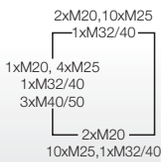
Mi 9311

Built-in dimensions W 275 x H 425 x D 195 mm

- max. installation depth with built-in mounting plate 191 mm, with built-in DIN rail 180 mm
- box size 3
- please order DIN rails, mounting plates or covers additionally
- trilaterally combinable
- 3 walls with metric knockouts for cable entry and assembly
- lid hinges attached
- with opaque, hinged lid
- lid fasteners for tool operation



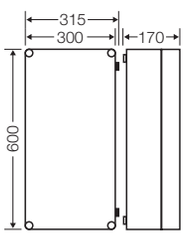


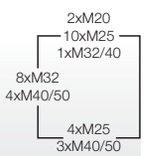


Mi 9401

Built-in dimensions W 275 x H 575 x D 150 mm

- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- box size 4
- please order DIN rails, mounting plates or covers additionally
- trilaterally combinable
- 3 walls with metric knockouts for cable entry and assembly
- lid hinges attached
- with opaque, hinged lid
- lid fasteners for tool operation

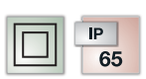


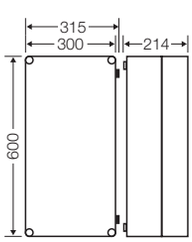


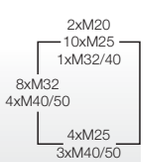
Mi 9411

Built-in dimensions W 275 x H 575 x D 195 mm

- max. installation depth with built-in mounting plate 191 mm, with built-in DIN rail 180 mm
- box size 4
- please order DIN rails, mounting plates or covers additionally
- trilaterally combinable
- 3 walls with metric knockouts for cable entry and assembly
- lid hinges attached
- with opaque, hinged lid
- lid fasteners for tool operation





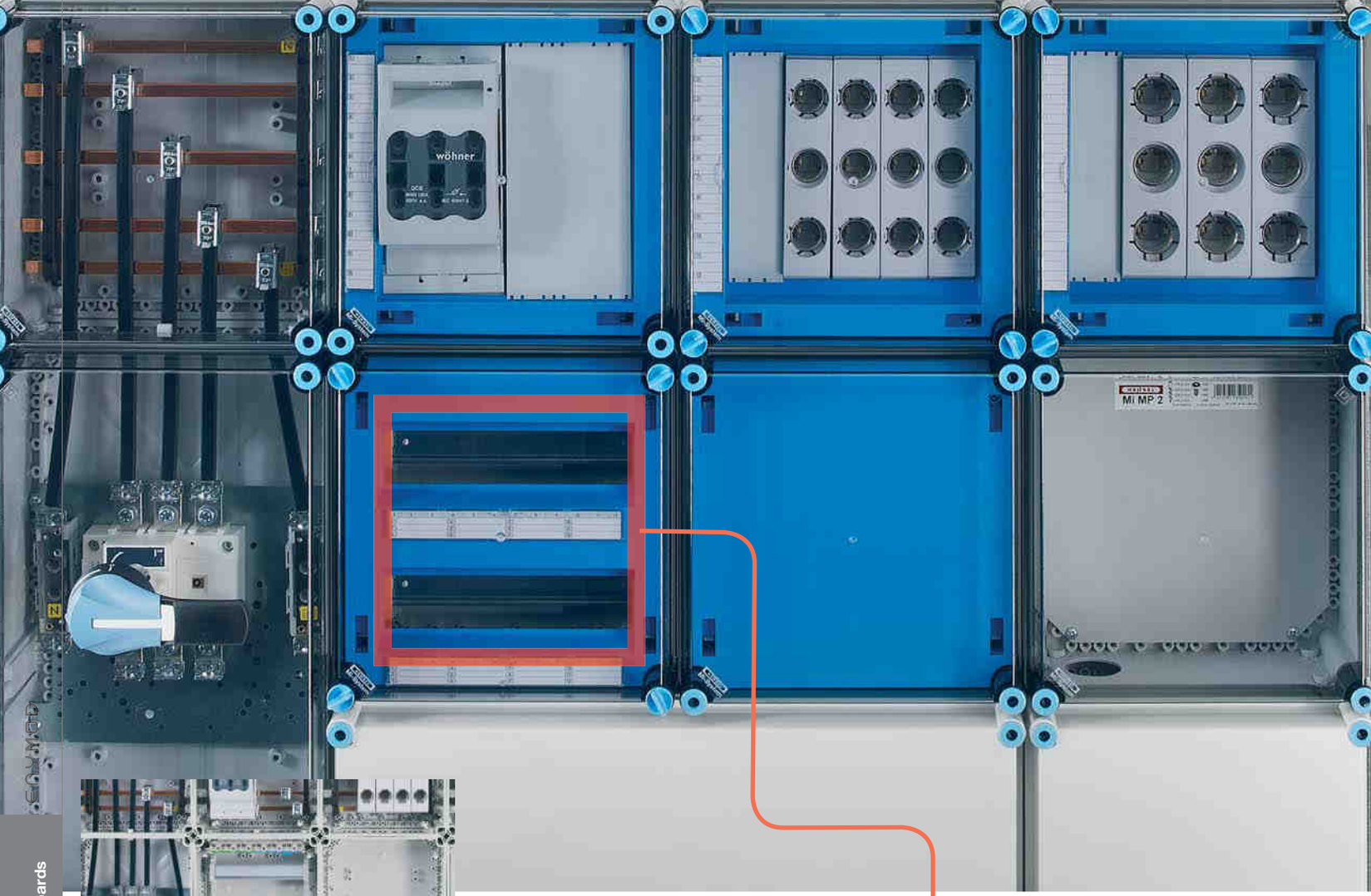


Please note:

Terminals for incoming/ outgoing cables under accessories

Covers for protection of installation device, see accessories

Empty enclosures with hinged lids



Mi Distribution Boards

Circuit breaker boxes with or without PE and N terminals with hinged flaps

for the assembly of power distribution boards (PSC) up to 630 A in accordance with IEC 61430-2

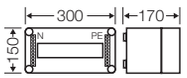
- Transparent lids
- Hinged flap or hinged lid for an easy operation of installation devices
- Hinged flap lock against unauthorised opening under accessories
- Circuit breaker boxes with or without PE and N terminals
- Protection against direct contact with hazardous live parts for operable installation devices
- Included blanking strips for unused DIN rail openings
- Attached labelling strips for circuit identification
- Enclosures can also be used as single boxes
- Protection class II, ⧈
- Degree of protection: IP 65
- Material: PC (polycarbonate)
- Colour: grey, RAL 7035

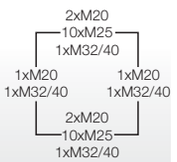
Mi Distribution Boards
Circuit breaker box with PE and N terminals

Mi 1109

9 modules: 1 x 9 x 18 mm

- 1-row
- FIXCONNECT® plug-in terminal technology for PE and N
- PE/N 2 x 25 mm², 8 x 4 mm², Cu each
- for installation of DIN rail equipment in accordance with DIN 43880
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation

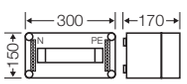


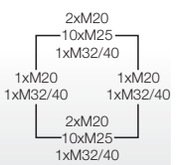


Mi 1112

12 modules: 1 x 12 x 18 mm

- 1-row
- with screw-type terminals for PE/N, for copper conductors
- per PE/N 10 x 16 mm², Cu
- for installation of DIN rail equipment in accordance with DIN 43880
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation

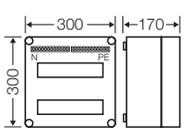


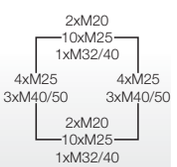


Mi 1224

24 modules: 2 x 12 x 18 mm

- 2-row
- FIXCONNECT® plug-in terminal technology for PE and N
- per PE/N 3 x 25 mm², 12 x 4 mm², Cu
- N separable for various potentials
- for installation of DIN rail equipment in accordance with DIN 43880
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation

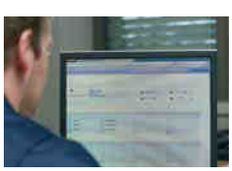




Please note:

Connection box for plug devices, push buttons or switches under accessories

Cover cutouts against direct contact with hazardous live parts



Editable labelling strips: www.hensel-electric.de

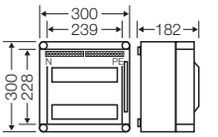
Mi Distribution Boards

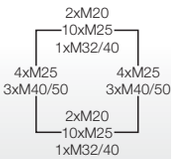
Circuit breaker box with PE and N terminals

Mi 1220

24 modules: 2 x 12 x 18 mm

- 2-row
- with hinged lid
- FIXCONNECT® plug-in terminal technology for PE and N
- per PE/N 3 x 25 mm², 12 x 4 mm², Cu
- N separable for various potentials
- for installation of DIN rail equipment in accordance with DIN 43880
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation

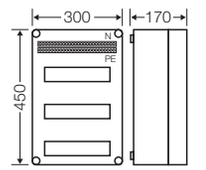


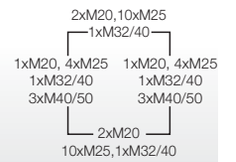


Mi 1336

36 modules: 3 x 12 x 18 mm

- 3-row
- FIXCONNECT® plug-in terminal technology for PE and N
- per PE/N 6 x 25 mm², 24 x 4 mm², Cu
- N separable for various potentials
- for installation of DIN rail equipment in accordance with DIN 43880
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation

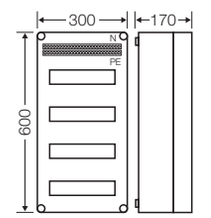




Mi 1448

48 modules: 4 x 12 x 18 mm

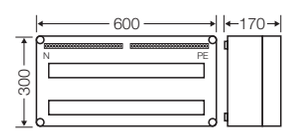
- 4-row
- FIXCONNECT® plug-in terminal technology for PE and N
- per PE/N 6 x 25 mm², 24 x 4 mm², Cu
- N separable for various potentials
- for installation of DIN rail equipment in accordance with DIN 43880
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation

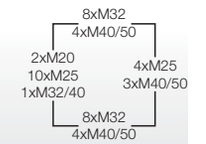


Mi 1456

56 modules: 2 x 28 x 18 mm

- 2-row
- FIXCONNECT® plug-in terminal technology for PE and N
- per PE/N 6 x 25 mm², 24 x 4 mm², Cu
- N separable for various potentials
- for installation of DIN rail equipment in accordance with DIN 43880
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation
- with removable DIN rail rack and earth connection
- DIN rail rack can be earthed





Mi Distribution Boards

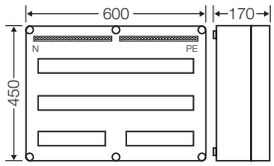
Circuit breaker box with PE and N terminals

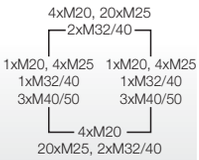
Mi 1684

80 modules: 2 x 28 x 18 mm and 2 x 12 x 18 mm

- 3-row
- FIXCONNECT® plug-in terminal technology for PE and N
- per PE/N 6 x 25 mm², 24 x 4 mm², Cu
- N separable for various potentials
- for installation of DIN rail equipment in accordance with DIN 43880
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation
- with removable DIN rail rack and earth connection
- DIN rail rack can be earthed

IP 65



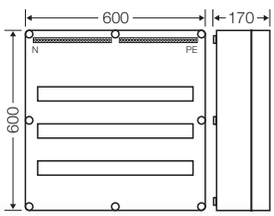


Mi 1884

84 modules: 3 x 28 x 18 mm

- 3-row
- FIXCONNECT® plug-in terminal technology for PE and N
- per PE/N 6 x 25 mm², 24 x 4 mm², Cu
- N separable for various potentials
- for installation of DIN rail equipment in accordance with DIN 43880
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation
- with removable DIN rail rack and earth connection
- DIN rail rack can be earthed
- cable entry only possible via flange

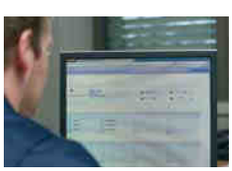
IP 65



Please note:

Connection box for plug devices, push buttons or switches under accessories

Cover cutouts against direct contact with hazardous live parts



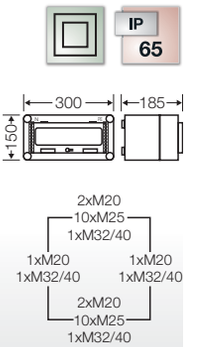
Editable labelling strips: www.hensel-electric.de

Mi Distribution Boards
circuit breaker box with flap

Mi 1111

12 modules: 1 x 12 x 18 mm

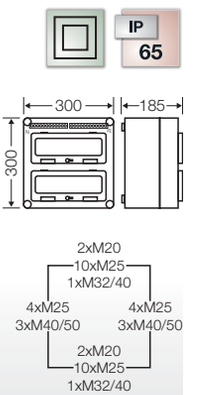
- 1-row
- with 1 hinged flap
- hinged flap lockable with accessories
- with screw-type terminals for PE/N, for copper conductors
- per PE/N 10 x 16 mm², Cu
- for installation of DIN rail equipment in accordance with DIN 43880
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation



Mi 1222

24 modules: 2 x 12 x 18 mm

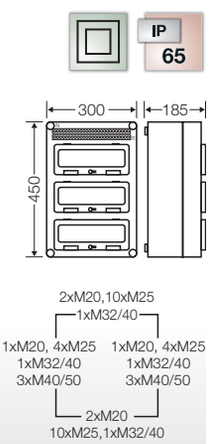
- 2-row
- with 2 hinged flaps
- hinged flap lockable with accessories
- FIXCONNECT® plug-in terminal technology for PE and N
- per PE/N 3 x 25 mm², 12 x 4 mm², Cu
- N separable for various potentials
- for installation of DIN rail equipment in accordance with DIN 43880
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation



Mi 1333

36 modules: 3 x 12 x 18 mm

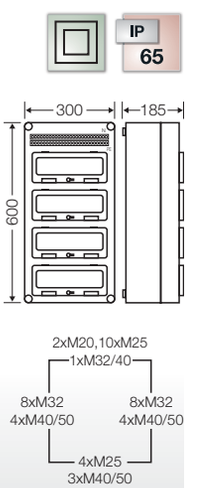
- 3-row
- with 3 hinged flaps
- hinged flap lockable with accessories
- FIXCONNECT® plug-in terminal technology for PE and N
- per PE/N 6 x 25 mm², 24 x 4 mm², Cu
- N separable for various potentials
- for installation of DIN rail equipment in accordance with DIN 43880
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation



Mi 1444

48 modules: 4 x 12 x 18 mm

- 4-row
- with 4 hinged flaps
- hinged flap lockable with accessories
- FIXCONNECT® plug-in terminal technology for PE and N
- per PE/N 6 x 25 mm², 24 x 4 mm², Cu
- N separable for various potentials
- for installation of DIN rail equipment in accordance with DIN 43880
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation

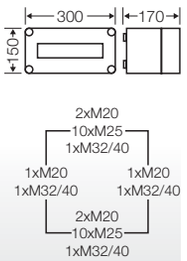


Mi Distribution Boards
Circuit breaker box without PE and N terminals

Mi 1115

12 modules: 1 x 12 x 18 mm without PE and N terminal

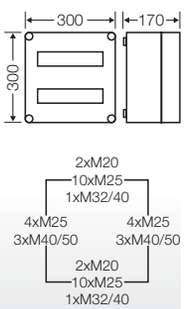
- 1-row
- for installation of DIN rail equipment in accordance with DIN 43880
- order PE/N terminals separately
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation



Mi 1225

24 modules: 2 x 12 x 18 mm without PE and N terminal

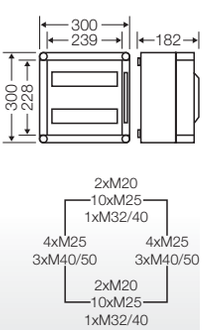
- 2-row
- for installation of DIN rail equipment in accordance with DIN 43880
- order PE/N terminals separately
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation



Mi 1226

24 modules: 2 x 12 x 18 mm without PE and N terminal with hinged lid

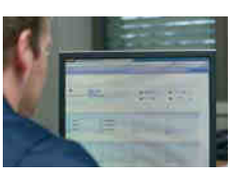
- 2-row
- for installation of DIN rail equipment in accordance with DIN 43880
- order PE/N terminals separately
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation



Please note:

Connection box for plug devices, push buttons or switches under accessories

Cover cutouts against direct contact with hazardous live parts



Editable labelling strips: www.hensel-electric.de

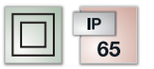
Mi Distribution Boards

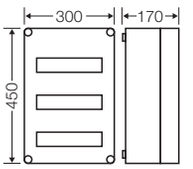
Circuit breaker box without PE and N terminals

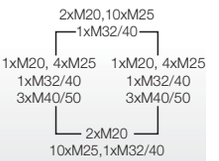
Mi 1335

36 modules: 3 x 12 x 18 mm without PE and N terminal

- 3-row
- for installation of DIN rail equipment in accordance with DIN 43880
- order PE/N terminals separately
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation



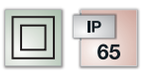


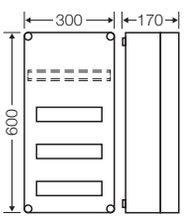


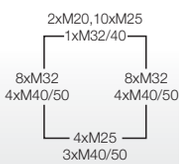
Mi 1440

36 modules: 3 x 12 x 18 mm without PE and N terminal with additional DIN rail

- 4-row
- with 1 DIN rail 216 mm wide (for installation depth of 72 mm)
- for installation of DIN rail equipment in accordance with DIN 43880
- order PE/N terminals separately
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation



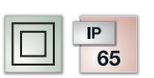


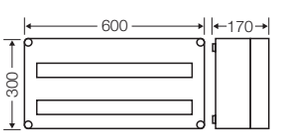


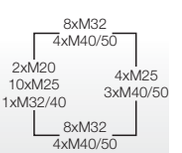
Mi 1455

56 modules: 2 x 28 x 18 mm without PE and N terminal

- 2-row
- for installation of DIN rail equipment in accordance with DIN 43880
- order PE/N terminals separately
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation
- with removable DIN rail rack and earth connection





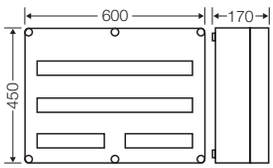


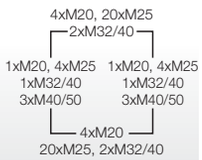
Mi 1683

80 modules: 2 x 28 x 18 mm and 2 x 12 x 18 mm without PE and N terminal

- 3-row
- for installation of DIN rail equipment in accordance with DIN 43880
- order PE/N terminals separately
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation
- with removable DIN rail rack and earth connection

IP 65



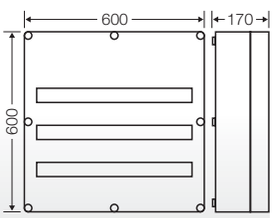


Mi 1885

84 modules: 3 x 28 x 18 mm without PE and N terminal

- 3-row
- for installation of DIN rail equipment in accordance with DIN 43880
- order PE/N terminals separately
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation
- with removable DIN rail rack and earth connection
- cable entry only possible via flange

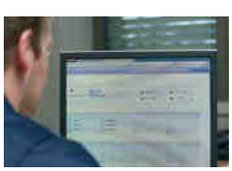
IP 65



Please note:

Connection box for plug devices, push buttons or switches under accessories

Cover cutouts against direct contact with hazardous live parts



Editable labelling strips: www.hensel-electric.de

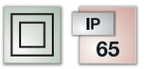
Mi Distribution Boards

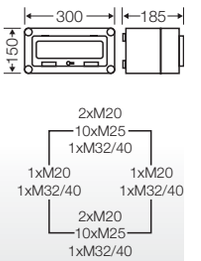
Circuit breaker boxes without PE and N terminals with hinged flaps

Mi 1117

12 modules: 1 x 12 x 18 mm without PE and N terminal

- 1-row
- with 1 hinged flap
- hinged flap lockable with accessories
- for installation of DIN rail equipment in accordance with DIN 43880
- order PE/N terminals separately
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation

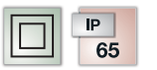


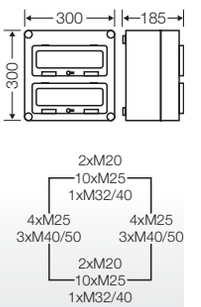


Mi 1227

24 modules: 2 x 12 x 18 mm without PE and N terminal

- 2-row
- with 2 hinged flaps
- hinged flap lockable with accessories
- for installation of DIN rail equipment in accordance with DIN 43880
- order PE/N terminals separately
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation

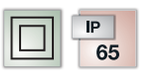


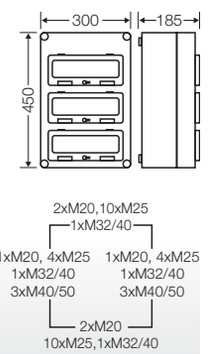


Mi 1337

36 modules: 3 x 12 x 18 mm without PE and N terminal

- 3-row
- with 3 hinged flaps
- hinged flap lockable with accessories
- for installation of DIN rail equipment in accordance with DIN 43880
- order PE/N terminals separately
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation

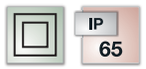




Mi Distribution Boards

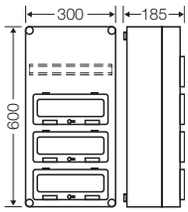
Circuit breaker boxes without PE and N terminals with hinged flaps

Mi 1443

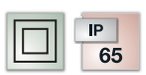


36 modules: 3 x 12 x 18 mm without PE and N terminal with additional DIN rail

- 4-row
- with 3 hinged flaps
- hinged flap lockable with accessories
- with 1 DIN rail 216 mm wide (for installation depth of 72 mm)
- for installation of DIN rail equipment in accordance with DIN 43880
- order PE/N terminals separately
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation

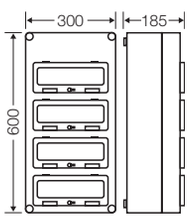


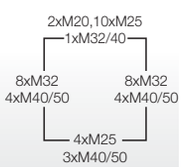
Mi 1445



48 modules: 4 x 12 x 18 mm without PE and N terminal

- 4-row
- with 4 hinged flaps
- hinged flap lockable with accessories
- for installation of DIN rail equipment in accordance with DIN 43880
- order PE/N terminals separately
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation

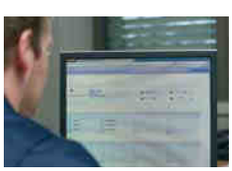




Please note:

Connection box for plug devices, push buttons or switches under accessories

Cover cutouts against direct contact with hazardous live parts

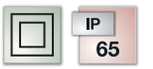


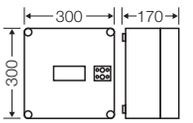
Editable labelling strips: www.hensel-electric.de

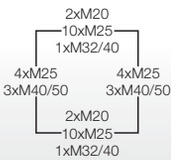
Mi 1281

6 modules: 1 x 6 x 18 mm
for miniature circuit breakers (MCB)

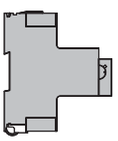
- 1-row
- with 1-pole main branch terminal for copper conductors
- PEN 2 x 25 mm², 2 x 16 mm², Cu, round conductors
- protection cover can be sealed, with lockable cover strip
- lid fasteners for hand operation



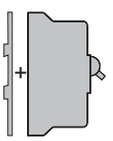




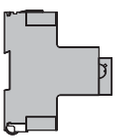
Note:
Prepared for the installation of currently commercially available miniature circuit-breakers (MDB)



for example
ABN Type XHA 3..-4
Hager Type HTN..E
etc.
SHA
(voltage dependent)



for example
ABB Type S 701/S 703
+ adapter for DIN rail
S 700 BT3
(1 pc. for S 701, 2 pc. for S 703)
SHU (voltage dependent)



for example
ABB Type S 80.-...
SHU (voltage dependent)

Mi Distribution Boards

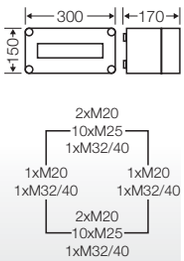
Circuit breaker box
with removable DIN rail rack for earth connection

Mi 1118

12 modules: 1 x 12 x 18 mm without PE and N terminal

- 1-row
- for installation of DIN rail equipment in accordance with DIN 43880
- order PE/N terminals separately
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation
- with removable DIN rail rack and earth connection
- DIN rail rack can be earthed

IP 65

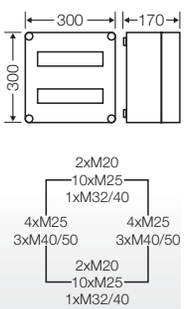


Mi 1228

24 modules: 2 x 12 x 18 mm without PE and N terminal

- 2-row
- for installation of DIN rail equipment in accordance with DIN 43880
- order PE/N terminals separately
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation
- with removable DIN rail rack and earth connection
- DIN rail rack can be earthed

IP 65

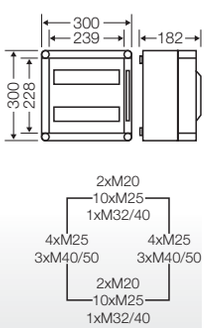


Mi 1221

24 modules: 2 x 12 x 18 mm without PE and N terminal with hinged lid

- 2-row
- for installation of DIN rail equipment in accordance with DIN 43880
- order PE/N terminals separately
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation
- with removable DIN rail rack and earth connection
- DIN rail rack can be earthed

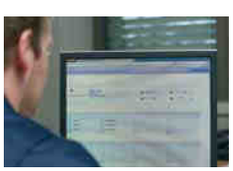
IP 65



Please note:

Connection box for plug devices, push buttons or switches under accessories

Cover cutouts against direct contact with hazardous live parts



Editable labelling strips: www.hensel-electric.de

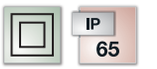
Mi Distribution Boards

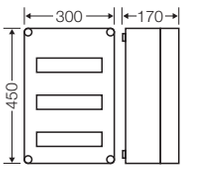
Circuit breaker box
with removable DIN rail rack for earth connection

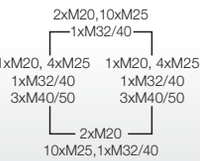
Mi 1338

36 modules: 3 x 12 x 18 mm without PE and N terminal

- 3-row
- for installation of DIN rail equipment in accordance with DIN 43880
- with blanking strips for unused DIN rail openings
- order PE/N terminals separately
- lid fasteners for hand operation
- with removable DIN rail rack and earth connection
- DIN rail rack can be earthed



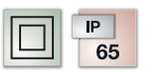


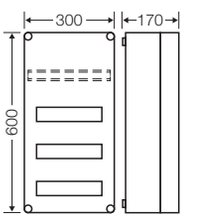


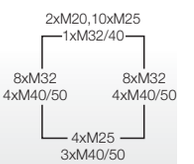
Mi 1446

36 modules: 3 x 12 x 18 mm without PE and N terminal with additional DIN rail

- 4-row
- with 1 DIN rail 216 mm wide (for installation depth of 72 mm)
- for installation of DIN rail equipment in accordance with DIN 43880
- order PE/N terminals separately
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation
- with removable DIN rail rack and earth connection
- DIN rail rack can be earthed



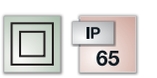


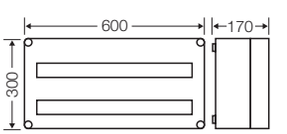


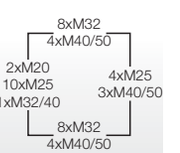
Mi 1455

56 modules: 2 x 28 x 18 mm without PE and N terminal

- 2-row
- for installation of DIN rail equipment in accordance with DIN 43880
- order PE/N terminals separately
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation
- with removable DIN rail rack and earth connection







Removable DIN rail rack for earth connection

Mi Distribution Boards

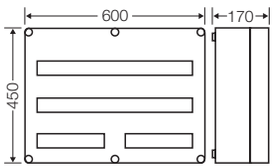
Circuit breaker box
with removable DIN rail rack for earth connection

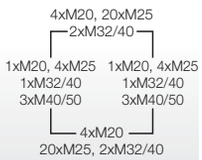
Mi 1683

80 modules: 2 x 28 x 18 mm and 2 x 12 x 18 mm without PE and N terminal

IP 65

- 3-row
- for installation of DIN rail equipment in accordance with DIN 43880
- order PE/N terminals separately
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation
- with removable DIN rail rack and earth connection



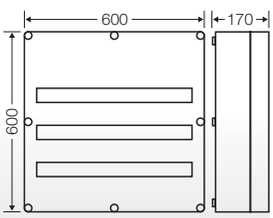


Mi 1885

84 modules: 3 x 28 x 18 mm without PE and N terminal

IP 65

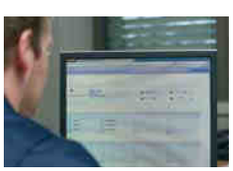
- 3-row
- for installation of DIN rail equipment in accordance with DIN 43880
- order PE/N terminals separately
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation
- with removable DIN rail rack and earth connection
- cable entry only possible via flange



Please note:

Connection box for plug devices, push buttons or switches under accessories

Cover cutouts against direct contact with hazardous live parts



Editable labelling strips: www.hensel-electric.de

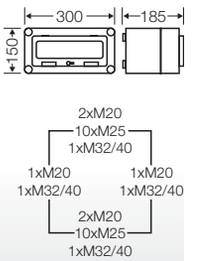
Mi Distribution Boards

Circuit breaker box
with removable DIN rail rack for earth connection

Mi 1119

12 modules: 1 x 12 x 18 mm without PE and N terminal

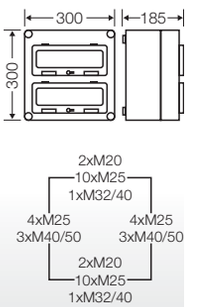
- 1-row
- with 1 hinged flap
- hinged flap lockable with accessories
- for installation of DIN rail equipment in accordance with DIN 43880
- order PE/N terminals separately
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation
- with removable DIN rail rack and earth connection
- DIN rail rack can be earthed



Mi 1229

24 modules: 2 x 12 x 18 mm

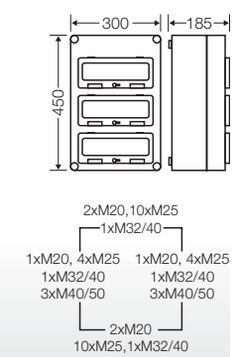
- 2-row
- with 2 hinged flaps
- hinged flap lockable with accessories
- for installation of DIN rail equipment in accordance with DIN 43880
- without PE and N terminal
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation
- with removable DIN rail rack and earth connection
- DIN rail rack can be earthed



Mi 1339

36 modules: 3 x 12 x 18 mm without PE and N terminal

- 3-row
- with 3 hinged flaps
- hinged flap lockable with accessories
- for installation of DIN rail equipment in accordance with DIN 43880
- order PE/N terminals separately
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation
- with removable DIN rail rack and earth connection
- DIN rail rack can be earthed



Removable DIN rail rack for earth connection

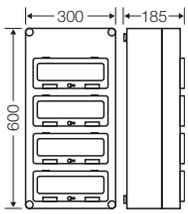
Mi Distribution Boards

Circuit breaker box
with removable DIN rail rack for earth connection

Mi 1449

48 modules: 4 x 12 x 18 mm
without PE and N terminal

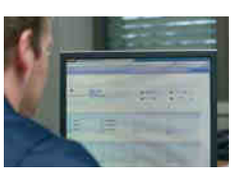
- 4-row
- with 4 hinged flaps
- hinged flap lockable with accessories
- for installation of DIN rail equipment in accordance with DIN 43880
- order PE/N terminals separately
- with blanking strips for unused DIN rail openings
- lid fasteners for hand operation
- with removable DIN rail rack and earth connection
- DIN rail rack can be earthed



Please note:

Connection box for plug devices, push buttons or switches under accessories

Cover cutouts against direct contact with hazardous live parts



Editable labelling strips: www.hensel-electric.de

Mi Distribution Boards

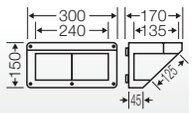
Accessories

Connection Box	339
Extension frames, DIN rails, spacers	340 - 341
Mounting plates, fixing screws	342 - 343
Covers, blanking strips	344 - 345
Terminals	346 - 349
Wall gasket, wall separator, fixing spares	350
Flanges, metal inserts for flanges, ventilation flanges	351 - 353
Pressure compensation element, canopy	354 - 355
Conversion kits for lid fasteners	356
Hinges for lids	357
Hinged flap, protection covers for hinged flaps	358
Components for wall mounting	359 - 360

Mi CB 10

Connection Box

- for the installation of devices that must be operated externally, such as plug devices, push buttons and switches
- for mounting to box walls 300 mm
- hinged mounting area
- with wall gasket



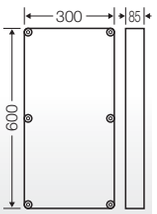
Application:

Connection box for plug devices, push buttons or switches under accessories

Mi ZR 4

Extension frame for enclosure size 4

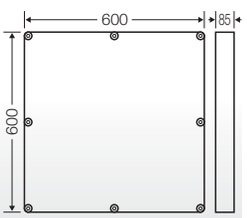
- for extension of the installation depth by 85 mm
- degree of protection IP 65 is maintained with use of up to two extension frames
- inclusive fixing material



Mi ZR 8

Extension frame for enclosure size 8

- for extension of the installation depth by 85 mm
- degree of protection IP 65 is maintained with use of up to two extension frames
- inclusive fixing material



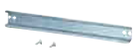
Application:

Increased enclosure depths of 85 mm using extension frames

Mi TS 15

DIN rail
length 134 mm

- in accordance with DIN EN 60715
- for Mi-Empty boxes sizes 1, 6
- for equipment or terminals with clip-on mounting
- with fixing screws



Mi TS 30

DIN rail
length 284 mm

- in accordance with DIN EN 60715
- for Mi-Empty boxes sizes 1, 2, 3, 4, 6, 8
- for equipment or terminals with clip-on mounting
- with fixing screws

Mi TS 45

DIN rail
length 434 mm

- in accordance with DIN EN 60715
- for Mi-Empty boxes sizes 3, 6
- for equipment or terminals with clip-on mounting
- with fixing screws

Mi TS 60

DIN rail
length 584 mm

- in accordance with DIN EN 60715
- for Mi-Empty boxes sizes 4, 6, 8
- for equipment or terminals with clip-on mounting
- with fixing screws

Mi DS 25

Spacer
height: 25 mm

- for spacing DIN-rails Mi TS ..
- 2 pieces
- with fixing screws for base of box and DIN rail

Mi DS 50

Spacer
height: 50 mm

- for spacing DIN-rails Mi TS ..
- 2 pieces
- with fixing screws for base of box and DIN rail

Application:

DIN rails for equipment or terminals with clip-on mounting

Mi MP 1

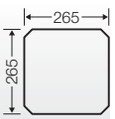
mounting plate
W 259 x H 115 mm

- material thickness 4 mm
- for Mi-Empty boxes sizes 1, 2, 3, 4, 6
- with fixing screws

Mi MP 2

mounting plate
W 265 x H 265 mm

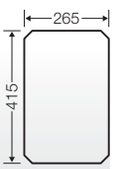
- material thickness 4 mm
- for Mi-Empty boxes sizes 2, 3, 4, 6, 8
- with fixing screws



Mi MP 3

mounting plate
W 265 x H 415 mm

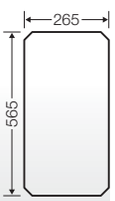
- material thickness 4 mm
- for Mi-Empty boxes sizes 3, 4, 6
- with fixing screws



Mi MP 4

mounting plate
W 265 x H 565 mm

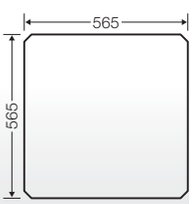
- material thickness 4 mm
- for Mi-Empty boxes sizes 4, 6, 8
- with fixing screws



Mi MP 8

mounting plate
W 565 x H 565 mm

- material thickness 4 mm
- for Mi Empty box size 8
- with fixing screws



Application:

Mounting plates for the installation of electrical devices

Mounting plates of various sizes in one enclosure

Mi BZ 11

fixing screw
length 11 mm

- for assembling DIN rails or mounting plates at the base of the box
- for material thicknesses of 1 to 2.5 mm
- self-tapping
- galvanised

Mi BZ 13

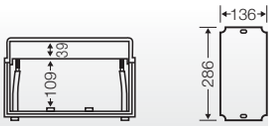
fixing screw
length 13 mm

- for assembling DIN rails or mounting plates at the base of the box
- for material thicknesses of 2.5 to 4 mm
- self-tapping
- galvanised

Mi EP 01

Cover
for Mi Empty box size 1

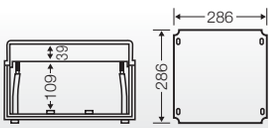
- for retrofitting
- cover without cut-outs made of plastics, as protection cover or for the installation of devices
- with fastening material



Mi EP 02

Cover
for Mi Empty box size 2

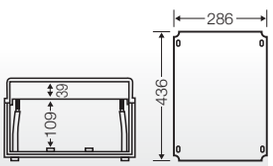
- for retrofitting
- cover without cut-outs made of plastics, as protection cover or for the installation of devices
- with fastening material



Mi EP 03

Cover
for Mi-Empty boxes sizes 3, 6

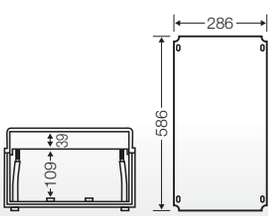
- for retrofitting
- 2 covers are required for Mi empty enclosure size 6
- cover without cut-outs made of plastics, as protection cover or for the installation of devices
- with fastening material



Mi EP 04

Cover
for Mi Empty box size 4

- for retrofitting
- cover without cut-outs made of plastics, as protection cover or for the installation of devices
- with fastening material



Application:

Covers for protection of installation device, see accessories

2 covers are required for Mi empty enclosure size 6

AS 12

Blanking strip
12 modules

- 12 x 18 mm, divisible every 9 mm
- for the covering of spare equipment openings, for material thickness up to 3 mm

AS 18

Blanking strip
18 modules

- 18 X 18 mm, divisible every 9 mm
- for the covering of spare equipment openings, for material thickness up to 3 mm

DAE 12

Spacer

- for improvement in the heat dissipation of DIN rail mounted devices
- consisting of 12 items

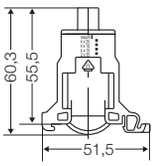
Application:

Cover cutouts against direct contact with hazardous live parts

KKL 25

Connecting terminal
Rated connecting capacity: 6-35 mm², Cu

- as a connecting terminal
- for installation on DIN rails in accordance with IEC 60715, top hat profile 35 mm
- current carrying capacity: 102 A
- 1-pole 6 x 6 mm² sol, 6 x 10 mm² sol/ f*, 4 x 16 mm² s/ f*, 4 x 25 mm² s/ f*, 2 x 35 mm² s/ f* each
  f* = with gas-tight end ferrule
- with two connected clamping units



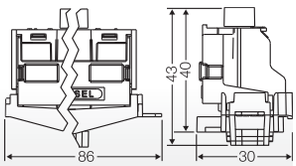
rated insulation voltage	Ui = 690 V a.c./d.c.
dismantling length	16 mm
tightening torque for terminal	3.0 Nm

FC L 10

Terminal
2 x 25 mm², 8 x 4 mm², Cu

- for installation on DIN rails in accordance with IEC 60715, top hat profile 35 mm
- FIXCONNECT® plug-in technology, for terminal technology refer to index technical data
- current carrying capacity: 101 A

rated insulation voltage	Ui = 690 V a.c.

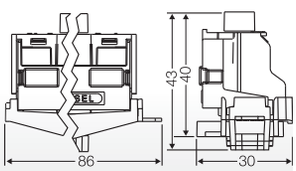


FC N 10

N terminal
2 x 25 mm², 8 x 4 mm², Cu

- for installation on DIN rails in accordance with IEC 60715, top hat profile 35 mm
- FIXCONNECT® plug-in technology, for terminal technology refer to index technical data
- current carrying capacity: 101 A

rated insulation voltage	Ui = 690 V a.c.

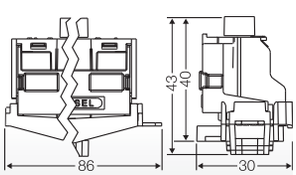


FC PE 10

PE terminal
2 x 25 mm², 8 x 4 mm², Cu

- for installation on DIN rails in accordance with IEC 60715, top hat profile 35 mm
- for boxes with 1 x 12 modules (through terminal reduction to 9 modules)
- FIXCONNECT® plug-in technology, for terminal technology refer to index technical data

rated insulation voltage	Ui = 690 V a.c.

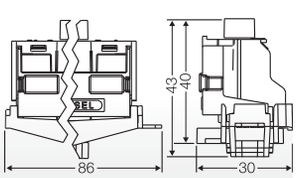


FC PN 10

PE and N terminal
per PE/N 1 x 25 mm², 4 x 4 mm² Cu

- for installation on DIN rails in accordance with IEC 60715, top hat profile 35 mm
- FIXCONNECT® plug-in technology, for terminal technology refer to index technical data
- current carrying capacity: 101 A

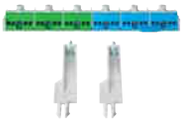
rated insulation voltage	Ui = 690 V a.c.



FC BS 5

FIXCONNECT labelling system
set with 5 pieces

- labelling system for FIXCONNECT® plug-in terminals, not for terminals 2x25 / 4x4 mm²
- for attaching of labelling strips or marking with felt tip pen

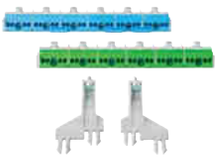


FC PN 30

PE and N terminal
per PE/N 3 x 25 mm², 12 x 4 mm², Cu

- 1-row
- FIXCONNECT® plug-in technology, for terminal technology refer to index technical data
- N separable, for up to 2 different potentials
- with fastening material
- current carrying capacity: 75 A

rated insulation voltage	Ui = 690 V a.c.



FC PN 60

PE and N terminal
per PE/N 6 x 25 mm², 24 x 4 mm², Cu

- 2-row
- FIXCONNECT® plug-in technology, for terminal technology refer to index technical data
- N separable, up to 4 different potentials
- with fastening material
- current carrying capacity: 75 A
- Not applicable in boxes Mi 1456, Mi 1455, Mi 1884 and Mi 1885

rated insulation voltage	Ui = 690 V a.c.

FC N 30

N terminal
per N 6 x 25 mm², 24 x 4 mm², Cu

- 1-row
- FIXCONNECT® plug-in technology, for terminal technology refer to index technical data
- N separable, up to 4 different potentials
- with fastening material
- current carrying capacity: 75 A

rated insulation voltage	Ui = 690 V a.c.

FC PE 30

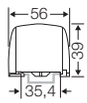
PE terminal
per PE 6 x 25 mm², 24 x 4 mm², Cu

- 1-row
- FIXCONNECT® plug-in technology, for terminal technology refer to index technical data
- with fastening material

rated insulation voltage	Ui = 690 V a.c.

KKL 34

Main line branch terminal
Rated connecting capacity: 1.5-25 mm², Cu

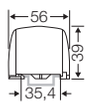


- as a connecting terminal
- for installation on DIN rails in accordance with IEC 60715, top hat profile 35 mm
- connections per terminal L1-L3: 4x
- connection: 1.5-16 mm² f* or 2.5-25mm², Cu, round conductor
  f* = with gas-tight end ferrule
- current carrying capacity: 80 A
- width: 61 mm

dismantling length	19 mm
tightening torque for terminal	2,5 Nm

KKL 48

Main line branch terminal
Rated connecting capacity: 1.5-25 mm², Cu

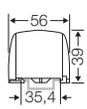


- as a connecting terminal
- for installation on DIN rails in accordance with IEC 60715, top hat profile 35 mm
- connections per terminal L1-L3, 4x
  connections per terminal N: 8x
- connection: 1.5-16 mm² f* or 2.5-25mm², Cu, round conductor
  f* = with gas-tight end ferrule
- current carrying capacity: 80 A
- width: 100 mm

dismantling length	19 mm
tightening torque for terminal	2,5 Nm

KKL 54

Main line branch terminal
Rated connecting capacity: 1.5-25 mm², Cu



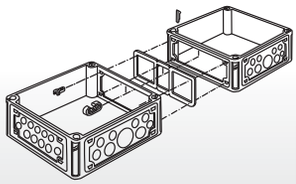
- as a connecting terminal
- for installation on DIN rails in accordance with IEC 60715, top hat profile 35 mm
- connections per terminal L1-L3: 4x
  connections per terminal N: 4x
  connections per terminal PE: 4x
- connection: 1.5-16 mm² f* or 2.5-25mm², Cu, round conductor
  f* = with gas-tight end ferrule
- current carrying capacity: 80 A
- width: 100 mm

dismantling length	19 mm
tightening torque for terminal	2,5 Nm

Mi WD 2

Wall gasket
for box walls 150/300 mm

- for the assembly of Mi boxes
- consisting of 1 seal, 4 wedge links, 1 bracket



Mi WT 1

Wall separator

- for subdivision of 300 mm box walls into 2 x 150 mm in case of flange or box assembly

Mi BE

Fixing spares
4 connectors

- for the assembly of Mi boxes
- when converting existing installations

Mi FP 15

Flange
without knockouts

- box wall 150 mm
- with fixing wedges and seal

mounting width	65 mm
mounting height	88 mm

Mi FM 15

Flange
knockouts 3 x M 20, 1 x M 32/40/50

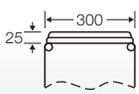
- box wall 150 mm
- with fixing wedges and seal

Mi FP 20

Flange
without knockouts

- box wall 300 mm
- with fixing wedges and seal

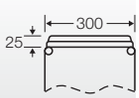
mounting width	215 mm
mounting height	88 mm



Mi FM 20

Flange
knockouts 15 x M 16, 15 x M 20

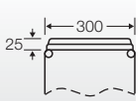
- box wall 300 mm
- with fixing wedges and seal



Mi FM 25

Flange
knockouts: 19 x M 16/25

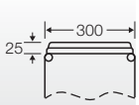
- box wall 300 mm
- with fixing wedges and seal



Mi FM 32

Flange
knockouts: 8 x M 25/32, 1 x M 25/32/40

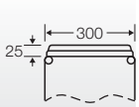
- box wall 300 mm
- with fixing wedges and seal



Mi FM 40

Flange
knockouts: 2 x M 25/32, 5 x M 32/40

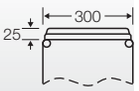
- box wall 300 mm
- with fixing wedges and seal



Mi FM 50

Flange
knockouts: 2 x M 20, 4 x M 32/40/50

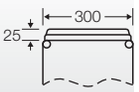
- box wall 300 mm
- with fixing wedges and seal



Mi FM 60

Flange
knockouts: 3 x M 40/50/63

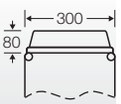
- box wall 300 mm
- with fixing wedges and seal



Mi FM 63

Flange with cable arrangement space
knockouts: 3 x M 40/50/63

- box wall 300 mm
- with fixing wedges and seal

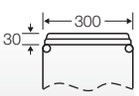


Mi FP 38

Flange
sealing range Ø 7-29 mm

- cable entry via integrated elastic membranes
- sealing range: 29 x Ø 7-12 mm, 4 x Ø 7-14 mm, 4 x Ø 11-20 mm, 1 x Ø 16-29 mm
- box wall 300 mm
- with fixing wedges and seal

IP 65

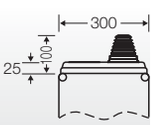


Mi FP 70

Flange
sealing range: 1 x Ø 30-72 mm

- box wall 300 mm
- with fixing wedges and seal

IP 65

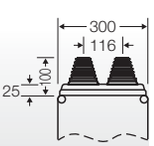


Mi FP 72

Flange
sealing range: 2 x each Ø 30-72 mm

- box wall 300 mm
- with fixing wedges and seal

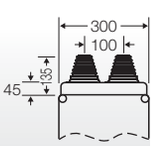
IP 65



Mi FP 82

Cable insert
sealing range: 2 x each Ø 30-72 mm

- box wall 300 mm
- divisible for cable insertion from the front
- degree of protection IP 54 only with additional strain and pressure relief (e.g. Mi ZE 62)



KST 82

Stepped grommet
sealing range: Ø 30-72 mm

- for retrofitting of cable insertion Mi FP 82
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C

Mi FP 30

Metal insert for flanges

- for earthing of metal armoured cables
- box wall 300 mm
- without knockouts

mounting width	215 mm
mounting height	88 mm

Mi ZE 62

Cable strain relief
for 2 cables with max. 60 mm external diameter

- with fixing rail 284 mm long
- to be used only in connection with cable insertion Mi FP 82

Mi GS 30

Box fin
for inserting cables across 2 boxes

- for box walls 300 mm
- removable
- can be retrofitted

Mi BF 44

IP 44

Ventilation flange
for vertical installation on box walls

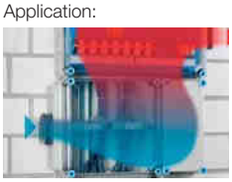
- box wall 300 mm
- for ventilation of Mi-Distribution boards in the event of extremely high internal temperatures or a risk of water condensation

BE 44

IP 44

Ventilation insert

Application:

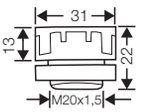


Ventilation via ventilation flange or ventilation insert

BM 20G

Pressure compensation element for M 20 knockouts

IP 54

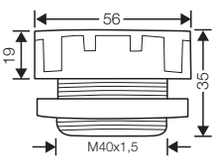


- for the reduction of condensation by pressure compensation in power distribution systems
- ISO thread M 20 x 1.5
- bore-hole: Ø 20.3 mm
- wall thickness up to 4 mm
- with counter nut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- In order not to exceed leakage limit of 0.07 bar with pressure compensation, one pressure compensation element BM 20G must be used per 28 litres (28000 cm³) of enclosure volume.
- Example: enclosure size 30 cm x 60 cm x 17 cm = 30600 cm³ = 30,6 litres. Number of necessary BM 20G (M32) = 2 piece.
- technical changes reserved
- Colour: grey, RAL 7035

BM 40G

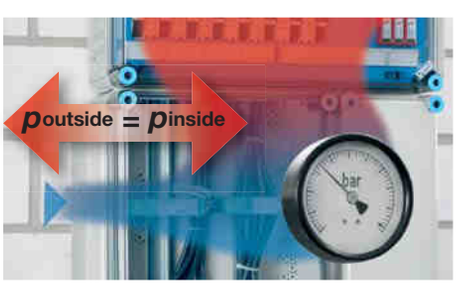
Pressure compensation element for M 40 knockouts

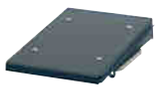
IP 54



- for the reduction of condensation by pressure compensation in power distribution systems
- ISO thread M 40 x 1.5
- bore-hole: Ø 40.3 mm
- wall thickness of up to 8 mm
- with counter nut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- In order not to exceed leakage limit of 0.07 bar with pressure compensation, one pressure compensation element BM 40G must be used per 122 litres (122000 cm³) of enclosure volume.
- Example: enclosure size 60 cm x 60 cm x 17 cm = 61200 cm³ = 61,2 litres. Number of necessary BM 40G (M40) = 1 piece.
- technical changes reserved
- Colour: grey, RAL 7035

Pressure compensation element

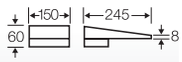




Mi DB 15

Canopy
for box wall 150 mm

- with fixing wedges and seal
- suitable for outdoor installation, UV resistant



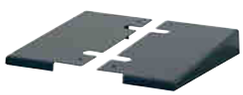
material	stainless steel powder-coated

Mi DB 30

Canopy
for 300 mm box walls

- with fixing wedges and seal
- suitable for outdoor installation, UV resistant

material	stainless steel powder-coated



Mi DB 01

Canopy end plate

- for canopies FP DB xx and Mi DB xx

material	stainless steel powder-coated

Application:

Canopy

Mi PL 2

Sealing cap

- 2 sealing caps for converting the lid fasteners

Mi SR 4

Conversion set
for manual operation on tool operation

- 4 fastening covers

Mi SN 4

Conversion set
for converting lid fasteners from tool to manual operation

- 4 manual actuators

Mi DV 01

Locking device insertion

- only in connection with Mi PL 2, Mi SR 4 or Mi SN 4

Mi ZS 11

Lid lock
with locking device I
for Mi boxes sizes 1 to 6

- Is being used instead of fasteners for hand or tool operation in order to prevent unauthorised opening of the lids
- consisting of: cylinder lock, keys, locking device insertion, dust cover

Mi ZS 12

Lid lock
with locking device II
for Mi boxes sizes 1 to 6

- Is being used instead of fasteners for hand or tool operation in order to prevent unauthorised opening of the lids
- consisting of: cylinder lock, keys, locking device insertion, dust cover

Mi DR 04

Lid fastener for tool operation
triangle 8 mm

- is used instead of fasteners for hand- or tool operation, in order to make unauthorized opening of lids more difficult
- 4 locking devices with triangle 8 mm and key

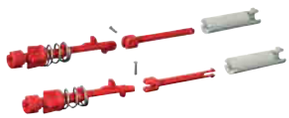
DS 1

Triangular key 8 mm

Mi SV 2

Conversion set
for padlock (clip Ø max. 10 mm)

- 2 fastening covers
- can be used instead of fasteners for hand or tool operation in order to prevent unauthorised opening of the lids



Mi ZS 20

Mi hinge for lids
for Mi boxes sizes 1, 2, 3, 4

- For operating installation device within a large area. The lid keeps permanently connected to the box.
- When assembling several boxes, the insertion can only be carried out for the external boxes.

Mi ZS 40

Mi hinge for lids
for Mi boxes sizes 1 to 8

- For operating installation device within a large area. The lid keeps permanently connected to the box.
- Wall connectors or flanges are necessary for assembly
- Not applicable in boxes with covers

Mi ZS 60

Mi hinge for lids
for Mi boxes sizes 4 and 8 with extension frame

- For operating installation device within a large area. The lid keeps permanently connected to the box.
- Wall connectors or flanges are necessary for assembly
- Not applicable in boxes with covers

Application:

Mi hinges for lids for operating within a large area

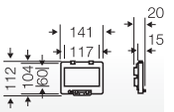
Mi hinges for lids for operating within a large area

Mi KL 6

Hinged flap
opening dimensions 117 x 60 mm

IP 65

- with drill and saw template
- modules 1 x 6 x 18 mm
- sealable
- lockable with hinged flap lock
- inclusive fixing material
- wall thickness 1.5-4.5 mm

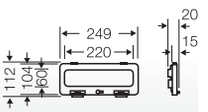


Mi KL 12

Hinged flap
opening dimensions 220 x 60 mm

IP 65

- with drill and saw template
- modules 1 x 12 x 18 mm
- sealable
- lockable with hinged flap lock
- inclusive fixing material
- wall thickness 1.5-4 mm

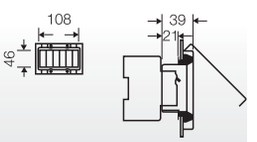


Mi BS 6

Protection cover
for Mi KL 6

- with fixing screws

modules	6 1 x 6 x 18 mm

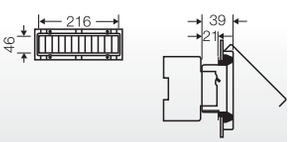


Mi BS 12

Protection cover
for Mi KL 12

- with fixing screws

modules	12 1 x 12 x 18 mm



Mi SK 01

Hinged flap lock

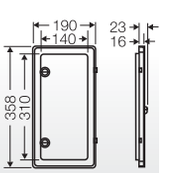
- for retrofitting in hinged flaps of 6 or 12 modules width
- for protecting the switchgear located behind the hinged flap against unauthorised access
  (only effective in connection with lid lock Mi ZS ..)
- consisting of:
- 1 lock (Mi KL), 2 keys, 1 grooved pin

NZ KL 54

KWH meter window flap
standard opening dimensions 140 x 310 mm

IP 54

- in accordance with DIN 43 870
- for tool or manual operation
- can be locked with padlock (clip diameter max. 6 mm)
- complete with screws
- sealable



Mi SA 2

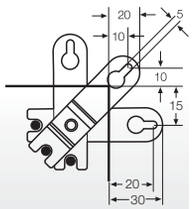
Dust protection cover

- for box sizes 1 to 4
- for 2 lid fittings

Mi AL 40

4 stainless steel external brackets

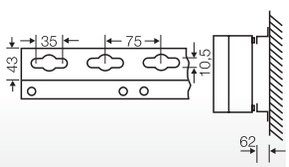
- for external fixing of enclosures



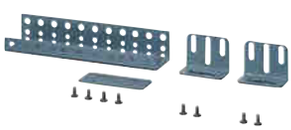
Mi MS 2

Profile for wall mounting

- for Mi distribution board assemblies up to 900 x 1200 mm
- with 8 screws M6 x 16, washers and nuts for mounting enclosures



length	1950 mm
material	sendzimir galvanised steel profile with structured powder coating



MX 0101

Mounting profile set
U-profile for constructing a mounting frame

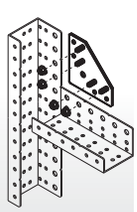
- constisting of:
  1 x mounting rail, 2 x fixing brackets,
  1 x flat connector with connecting screws

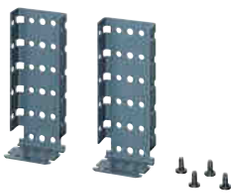
length	1950 mm
material	sheet steel, galvanised and powder-coated

MX 0112

frame connector set
for constructing a mounting frame

- fixing elements for T or L connections
- consisting of: 2 couplers with screws and nuts





MX 0105

Coupler set
for constructing a mounting frame

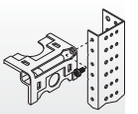
- 2 x couplers with connecting screws

material	sheet steel, galvanised and powder-coated

MX 0111

Screw for box fixing

- set with 12 pieces
- M 6 x 16
- self-tapping for fixing the Mi box onto mounting profile MX 0101



Varnishing pen RAL 7016

12 ml

Mi Distribution Boards

Technical details

Operating and ambient conditions	362
Standards and regulations	363
Dimensions in mm	364
Terminals	365
Power dissipation of empty enclosures	366 - 367
Box assembly	368 - 370
Device installation, wall mounting	371 - 373

Mi Distribution Boards

Technical details
Operating and ambient conditions

	Empty enclosures Mi 0... Mi 9...	Circuit breaker boxes Mi 1...	
Application area	**Suitable for indoor installation and outdoor installation, protected against weather influences** However, pay attention to the climatic effects on the installed equipment , for example, high or low ambient temperatures or formation of condensed water see technical information		
	Resistance to occasional cleaning procedures (direct jet) with high-pressure cleaner without cleaning additives, water pressure: max 100 bar, water temperature: Max. 80 °C, distance => 0.15 m, in accordance with IP 69K requirements, single enclosure without lid equipment (no enclosure assembly), **enclosure and cable glands at least IP 65.**		
Ambient temperature - Average value over 24 hours - Maximum value - Minimum value	 – + 70 °C – 25 °C	 + 35 °C + 40 °C – 5 °C	 The ambient temperature is reduced at distribution boares by the installed equipment technology!
Relative humidity - short-time	– –	50% at 40 °C 100% at 25 °C	
Fire protection in the event of internal faults	Demands placed on electrical devices from standards and laws: Minimum requirements - Glow wire test in accordance with IEC 60 695-2-11: - 650 °C for boxes and cable glands - 850 °C for conducting components		
Burning behaviour - Glow wire test IEC 60 695-2-11 - UL Subject 94	 960 °C V-2 flame-retardant self-extinguishing	 960 °C V-2 flame-retardant self-extinguishing	
Degree of protection against mechanical load	IK 08 (5 Joule)	IK 08 (5 Joule)	
Toxic behaviour	halogenfree [1] silicone-free	halogenfree [1] silicone-free	

[1] “Halogen-free” in accordance with IEC 60754-2“
Common test methods for cables - Determination of the amount of halogen acid gas”.

For material properties see technical data.

Mi Distribution Boards

Technical details
Standard and regulations

Mi Distribution Boards comply with the requirements of the IEC 61439-2

Distribution boards assembled and wired according to manufacturer data without essential deviations from the original type or system.

To meet these requirements for Hensel Mi Distribution Boards, the following must be noted:

1. The distribution boards must consist of the verified enclosures documented in this list.

2. The wiring of the equipment must be carried out with the cross-sections and conductor types indicated in Table “Rating of insulated conductors in switchgear assemblies”, Index Technics.

3. Once the distribution board is completed, a routine test must be carried out in accordance with this standard.

4. The test must be certified with a test report.

5. The assembly must be provided with a manufacturer’s identification mark.
   Compliance with important data such as
   - limit of temperature rise
   - dielectric strength
   - IP degrees of protection
   - creepage distances and clearances
   is verified for this system.

Standards and regulations

- IEC 61439-2
  Low-voltage switchgear and controlgear assemblies –
  Part 2: Power switchgear and controlgear assemblies
- IEC 60999, connecting devices
  Safety requirements for screw-type and screwless-type clamping units
  for electrical copper conductors
- DIN EN 50262
  Metric threaded cable glands for electrical installations
- DIN 43880
  Built-in equipment for electrical installations; overall dimensions
  and related mounting dimensions
- IEC 60529
  Degrees of protection provided by enclosures (IP-Code)

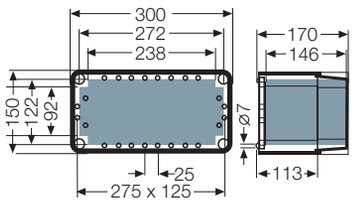
Mi Distribution Boards

Technical details
Dimensions in mm

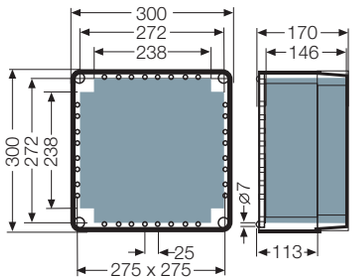
Dimensions of the interior installation depth with installed mounting plates.

The width of Mi Empty boxes Mi 9... enlarges about 15 mm because of the laterally mounted lid hinges, refer to product pages.

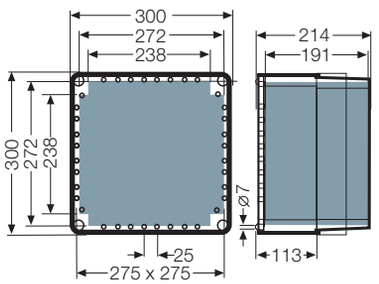
= usable installation space with mounted cable glands



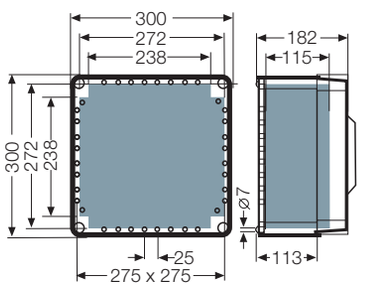
Mi 0100
Mi 0101
Mi 9100
Mi 9101



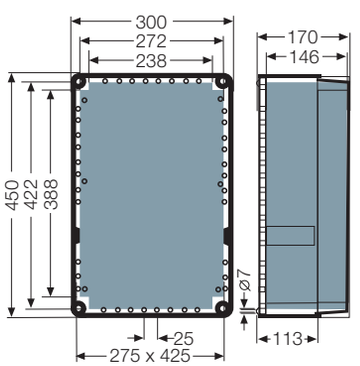
Mi 0200
Mi 0201
Mi 9200
Mi 9201



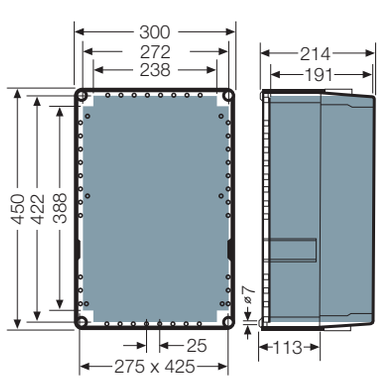
Mi 0210
Mi 0211
Mi 9210
Mi 9211



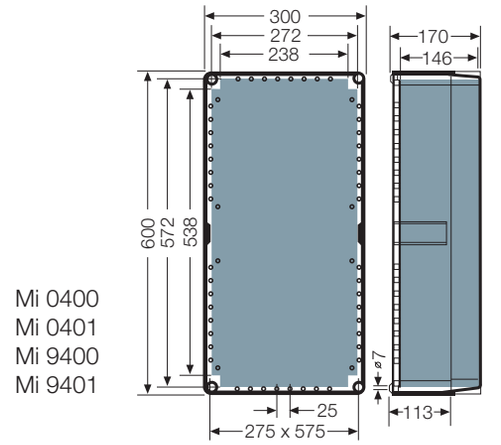
Mi 0220
Mi 0221



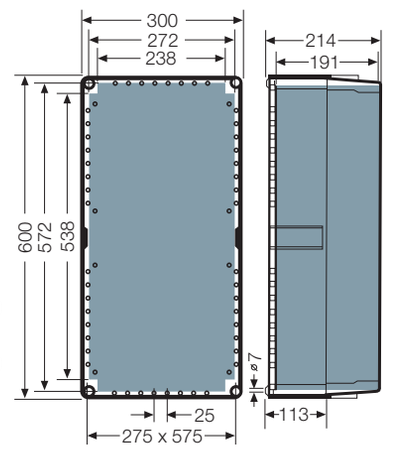
Mi 0300
Mi 0301
Mi 9310
Mi 9311



Mi 0310
Mi 0311
Mi 9310
Mi 9311

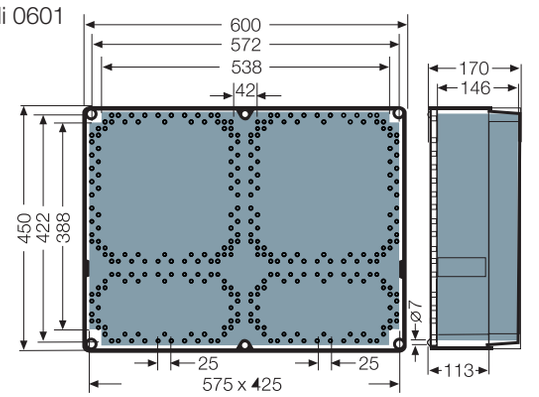


Mi 0400
Mi 0401
Mi 9400
Mi 9401

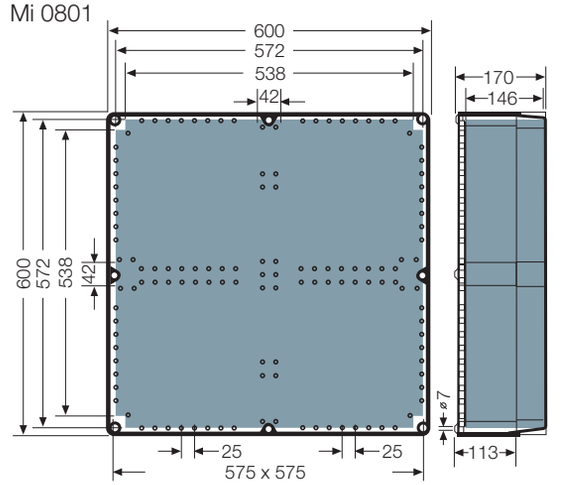


Mi 0410
Mi 0411
Mi 9410
Mi 9411

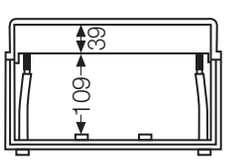
Mi 0600
Mi 0601



Mi 0800
Mi 0801



Installation of equipment in protection plates:
Pre-drill the sections at the corners, then saw away the section from the protection plate by using a piercing saw at middle to low cutting speed.
Use coarse toothed saw blades for plastics (e.g. Bosch T 101 B).



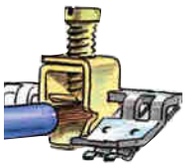
Mi Distribution Boards

Technical details
Terminals

PE und N FIXCONNECT®-Klemme

Rated connecting capacity of PE and N terminals

Current carrying capacity:
75 A

Clamping unit	Corresponding cross-sections / copper			
	max. number	from - to max.	max. number	from - to max.
 Screw-type terminal 25 mm²	1	25 mm², s	1	25 mm², f
	1	16 mm², s	1	16 mm², f
	1	10 mm², sol	1	10 mm², f
	3	6 mm², sol	1	6 mm², f
	3	4 mm², sol	1	4 mm², f
	4	2.5 mm², sol	1	2.5 mm², f
	4	1.5 mm², sol	1	1.5 mm², f
	Tested as connecting terminal for several conductors of the same cross-sections for using in one circuit			
 Plug-in terminal 4 mm²	1	1.5 - 4 mm², sol	1	1.5 - 4 mm², f Without end ferrule; clamping unit has to be opened with a tool when conductor is inserted.

Terminal equipment and number of conductors to be connected

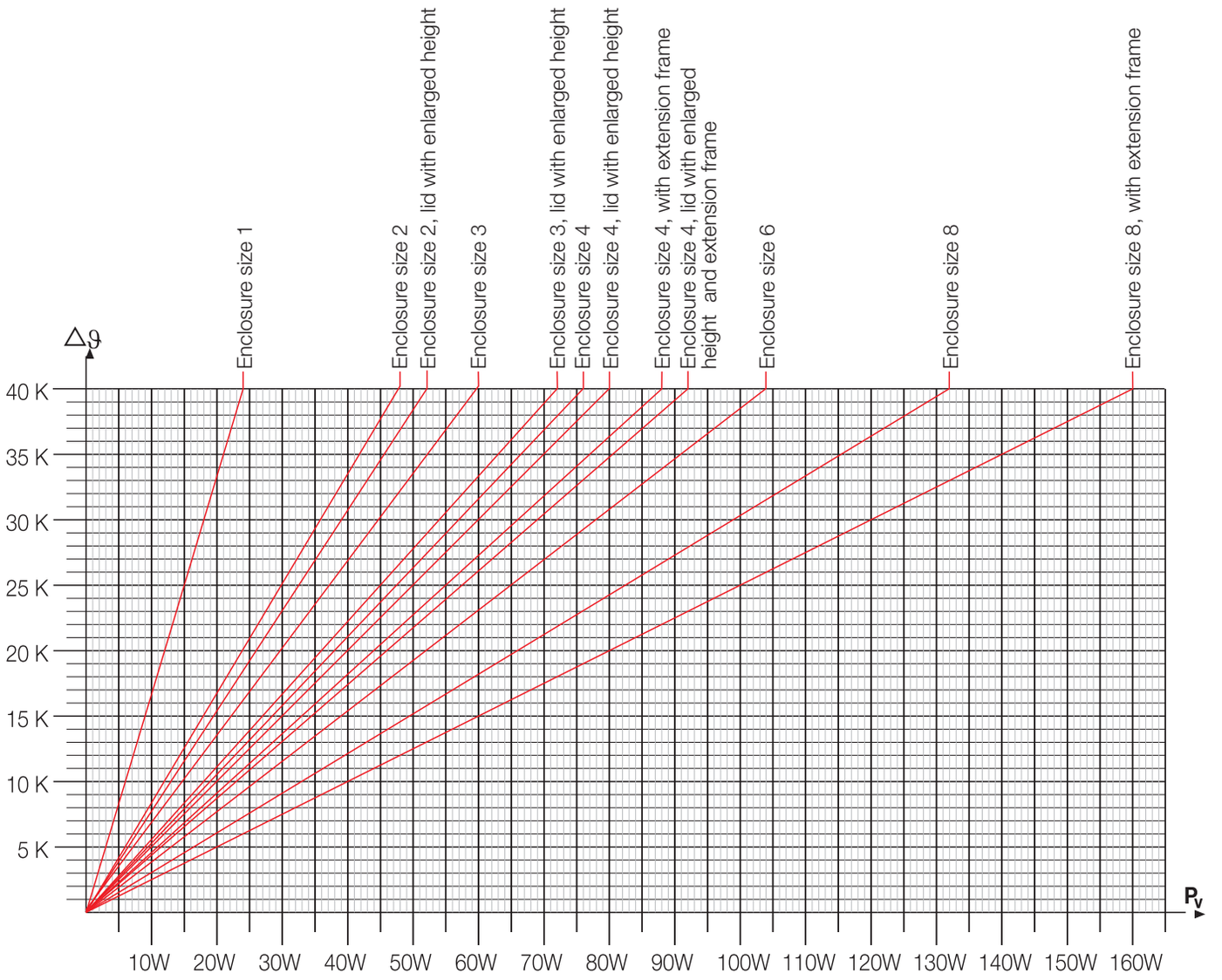
PE terminal

Number of modules	Mounted in Mi Circuit breaker boxes	PE terminal	
		up to 4 mm²	up to 25 mm²
24 (2-row)	Mi 1224 Mi 1220 Mi 1222	 12x4 mm²	2x25 mm²
36 (3-row) 48 (4-row)	Mi 1336 Mi 1333 Mi 1448 Mi 1444	 24x4 mm²	6x25 mm²

N terminal

Number of modules	Mounted in Mi Circuit breaker boxes	N terminal		
		up to 4 mm²	up to 25 mm²	plug-in jumper
24 (2-row)	Mi 1224 Mi 1220 Mi 1222	 12x4 mm²	3x25 mm²	
36 (3-row) 48 (4-row)	Mi 1336 Mi 1333 Mi 1448 Mi 1444	 24x4 mm²	6x25 mm²	

Temperature rise (Δϑ) with Mi-Distribution boards by power dissipation of electrical devices



Mi distribution boards enclosure sizes	dimensions (WxHxD) in mm	rated power dissipation P_V in watts per Kelvin assembled enclosures
enclosure size 1	300 x 150 x 170	0.6
enclosure size 2	300 x 300 x 170	1.2
enclosure size 2, lid with enlarged depth	300 x 300 x 214	1.3
enclosure size 3	300 x 450 x 170	1.5
enclosure size 3, lid with enlarged depth	300 x 450 x 214	1.8
enclosure size 4	300 x 600 x 170	1.9
enclosure size 4, lid with enlarged depth	300 x 600 x 214	2.0
enclosure size 4 with extension frame	300 x 600 x 255	2.2
enclosure size 4, lid with enlarged depth and extension frame	300 x 600 x 299	2.3
enclosure size 6	450 x 600 x 170	2.6
enclosure size 8	600 x 600 x 170	3.3
enclosure size 8 with extension frame	600 x 600 x 255	4.0

Note!

The maximally permissible operating temperature inside the enclosures (ϑ_{imax}) is determined by:

1st maximally permissible ambient temperature of the installed electrical devices (please consider data of the equipment manufacturers)

2nd category temperature of the internal wiring and the inserted cables

3rd temperature resistance of the enclosure materials and the cable entries etc.

Example: calculation of the maximum rated power dissipation (P_v)	
maximally permissible operating temperature inside the enclosure(s) (ϑ_{imax}):	e.g. 55 °C
ambient temperature of the enclosure(s) (ϑ_U):	25 °C
maximally permissible heating up inside the enclosure:	$\Delta\vartheta = \vartheta_{umax} - \vartheta_U$ = 55 °C - 25 °C = 30 K
maximum permissible power dissipation of the installed equipment inclusive wiring (P_v) in accordance with diagram:	enclosure size 3 (450 x 300 x 170 mm)
assembled enclosures:	P_v = 45 W

Example: calculation of the operating temperature inside the enclosure (ϑ_i)	
ambient temperature of the enclosure(s) (ϑ_U):	25 °C
rated power dissipation of the installed electrical equipment (P_V):	30 W
heating up inside the enclosures in accordance with diagram over:	$\Delta\vartheta$
enclosure size 3 (450 x 300 x 170 mm) assembled enclosures:	$\Delta\vartheta$ = 17 K; $\vartheta_i = \vartheta_U + \Delta\vartheta$ = 25 °C + 17 K = 42 °C

P_v = Power dissipation loss

Assembly of Mi distribution boards according to assembly draft

Pre-assembled and tested enclosures with electrical functions

Knock out of box walls for electrical connection and cable entry

Box walls are knocked out for the electrical connection within the distribution board.

For the assembly of the enclosures, the appropriate openings of the wedge joints are knocked out as well.

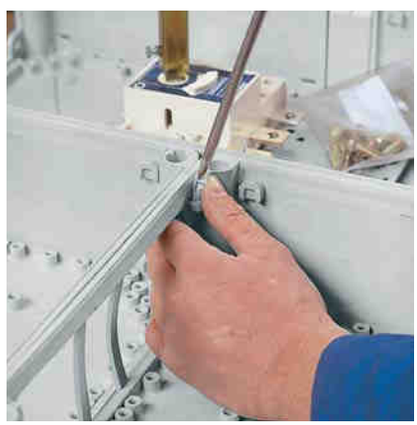
Assembly of boxes

For sealing the boxes in position , a self-adhesive wall gasket is stuck to the box wall (applies to closed box walls, too.)

The box assembly is carried out by a wedge connection.

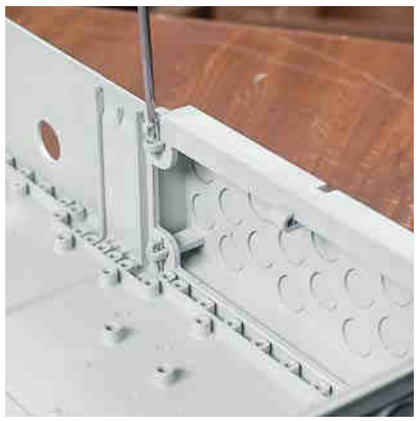
To increase stability, press wall clamps onto the box fins.

Use a wall separator for subdividing 300 mm box walls into two 150 mm walls for flange or box mounting.



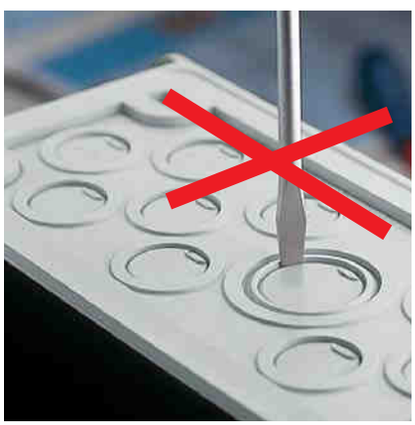
Flanges

Attach flanges by means of 4 wedge links and 1 clamp to the box wall.



Cable entry

Knock out the appropriate cable entries within flanges or box walls with screwdriver.



Cable glands

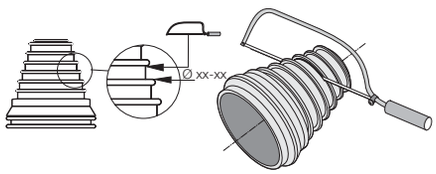
Insert cable gland into the appropriate knockout and fasten with lock nut.

Assembly of cable insertion

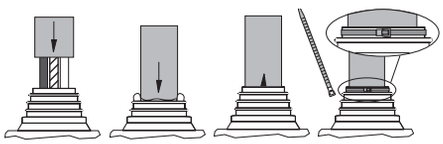
Knock out the respective box wall and saw out the upper box fin next to the wedge fastening.

Screw mount the cable insertion and insert the rubber entries.

Adjust stepped grommet on the cable diameter.



Insert cable and fix it with cable ties.



Insert the cable into the box from the front.

Installation of extension frame

Fix attachments for extension frame in base of enclosure.

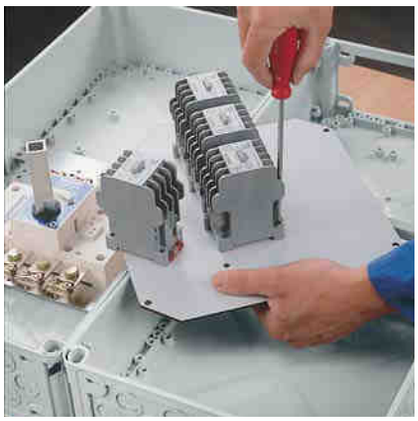
Right:
Place extension frame on base of enclosure.

Fix extension frame with screws onto base of enclosure.

Device installation on mounting plates or DIN rails

Fasten installation devices on mounting plates with self-threading screws.

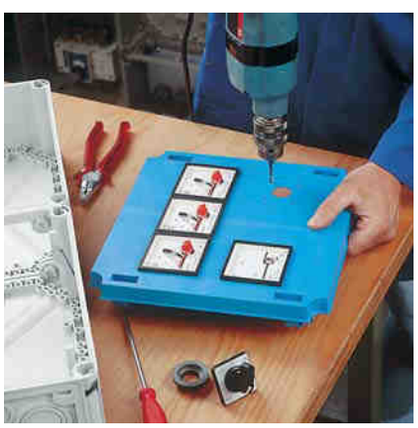
Screw mounting plate onto base of box.



Mount DIN rails directly onto base of boxes or on spacers Mi DS .. in heights of 25 or 50 mm.

Installaton of equipment in cover plates

Pre-drill the sections at the corners and saw out with piercing saw. Use saw blades with rough teeth for plastics.



Screw support for the protection cover Mi EP .. onto base of box.

Attach protection cover.

Close unused equipment openings in protection covers with attached blanking strips.

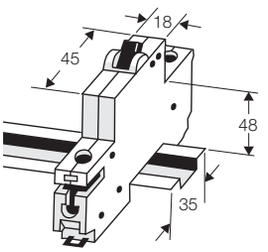
Device installation in circuit breaker boxes

Circuit breaker boxes can be fitted with any DIN rail equipment, if per row (12 modules 12x18 mm) the assigned backup fuse won‘t exceed 80 A.

PE and N terminals for copper conductors (installed)

Note to Mi Circuit breaker boxes:
Spare equipment openings in protection covers are to be covered with blanking strips to prevent accidental contact (blanking strips are enclosed for 50 % of equipment openings)

Dimension of 1 module:
1 Module = 18 mm



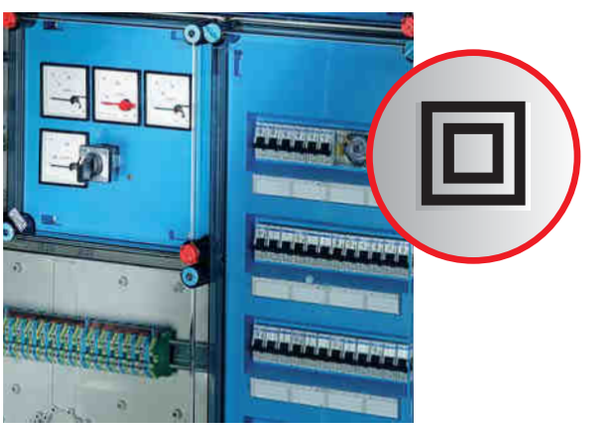
Dimensions according to DIN 43880 for DIN rail mounted device

Protection covers

Cover unused equipment openings with blanking strips to prevent accidental contact.

Provide for total protection against access to hazardous parts for accessible devices and busbar-mounted equipment.

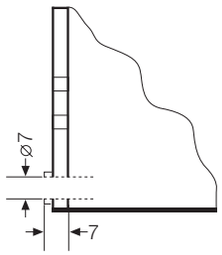
Protection class II, ⧈
(Total insulation)



Mi Distribution Boards

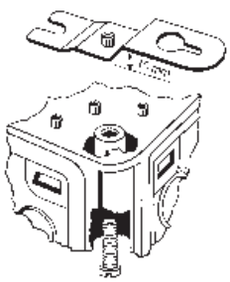
Technical details
Wall mounting, floor standing

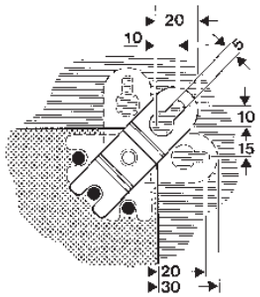
Wall mounting
directly through the base of the box



External brackets
for external box fixing

Mi AL 40 (4 brackets)



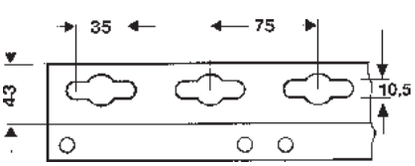


Mounting profile
for wall-mounted installation of Mi-Distribution boards, steel profile, 1950 mm long, dividable in the grid of 150 mm.

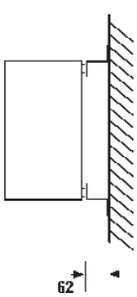
Mi MS 2

Note:
Please fix mounting profile in vertical position to enable a cable routing behind the assembly.

For cutting the required profile length fix mounting profile eg with a clamp to a desk.



Fixing matrix of mounting profile



Transport
Regarding transportation its recommendable to protect the assembly against deflection. For that please screw the assembly to a solid timber.


FERRAI-MMI
Process Controller-MFG
Velocity - m/sec
0.62
K 0100
022

Empty enclosures in accordance with IEC 62208

- **for customized solutions and individual applications**
- **for example for low-voltage switchgear and controlgear assemblies in accordance with the IEC 61439-series**
- **degree of protecton IP 55-IP 65**
- **made from thermoplastics**
- **protection class II, ⧈**

General information	376 - 377
Empty enclosures type KG, cable entry via metric knockouts	378 - 382
Empty enclosures type K, box walls without knockouts, can be drilled individually	383 - 386
Accessories	387 - 392
Technical details	393 - 397

Further technical information can be found on the Internet
www.hensel-electric.de -> Products

Empty enclosures in accordance with IEC 62208
for customized solutions and individual applications

IEC 62208
Enclosures for low-voltage switchgear and controlgear assemblies.
General requirements

General information

The IEC 62208 standard applies to empty enclosures, prior to the incorporation of switchgear and controlgear components by the user, as supplied by the enclosure manufacturer.

It specifies general definitions, classifications, characteristics and test requirements of enclosures to be used as part of switchgear and controlgear assemblies (e.g. in accordance with the IEC 61439-series).

Protection against electric shock

In order to protect individuals in the event of faults against electric shock and the accompanying risks, enclosures are classified with protection class I (electrical earth) and protection class II (protection by total or reinforced insulation) according to IEC 61439, section 8.4.4. HENSEL empty enclosures are manufactured from insulating material and provide protection against electric shock according to protection class II.

IP-Codes for protecting electrical equipment against dust and water

Electrical equipment must be protected from external influences and conditions for safety reasons. The two-digit IP-Codes indicate to what extent the enclosure provides protection against hazardous parts and ingress of dust (1st digit) or water (2nd digit). For example IP 65: Electrical equipment inside the enclosure is protected against dust and harmful water and humidity.

Therefore the IP-Codes indicate the suitability of enclosures for different environmental conditions.

Effects on the degree of protection (IP-Code) when devices are built in the lid

If any switches, displays, push buttons or other equipment are built into the lid of an enclosure, the manufacturer must consider the effects on the degree of protection at that specific point.

The installation of electrical equipment into the lid, door or wall of an enclosure can reduce the degree of protection of the enclosure in that specific installation area depending on the degree of protection of the equipment and depending on additional measures for sealing the point of entry.

Example: The installation of an IP 44 socket into the lid of an IP 65 enclosure reduces the degree of protection in that specific area to IP 44. The enclosure itself still provides IP 65, but the manufacturer has to draw attention to the fact, that the socket only provides IP 44 for the area where it is installed.

Empty enclosures in accordance with IEC 62208
for customized solutions and individual applications

Operating and ambient conditions

Empty enclosures according to IEC 62208 are applicable in ambient temperatures from -25 °C to +40 °C (outdoor installation) or from -5 °C to +40 °C (indoor installation).

The IEC 62208 requires the specification of the power dissipation capability P_{de} of the enclosures

Temperature rise in enclosures and power dissipation

In relationship with the outside temperatures the temperature rise inside of enclosures, caused by the flowing current and the power loss P_D of the installed electrical equipment, has to be considered.

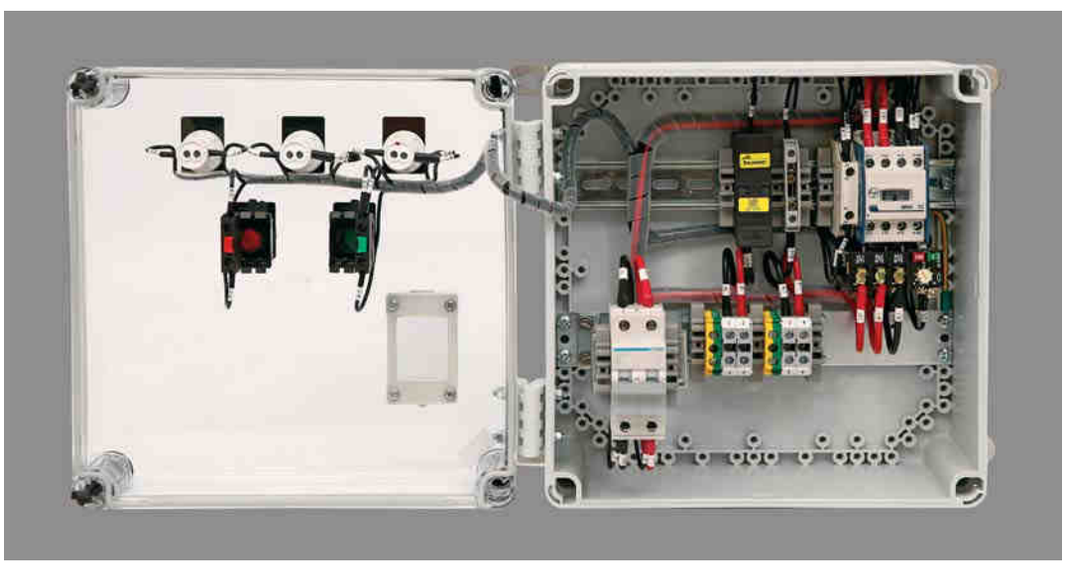
Most devices are designed for maximum ambient temperatures of +40 °C to +55 °C. Accordingly there may only be a narrow range for the temperature rise inside of the enclosure if the ambient temperature is close to the maximum operating temperature of the installed equipment.

The enclosure with its power dissipation capability P_{de} has to be able to dissipate the power loss P_D of the installed electrical equipment inside of the enclosure without exceeding the limits of operating and ambient temperatures.

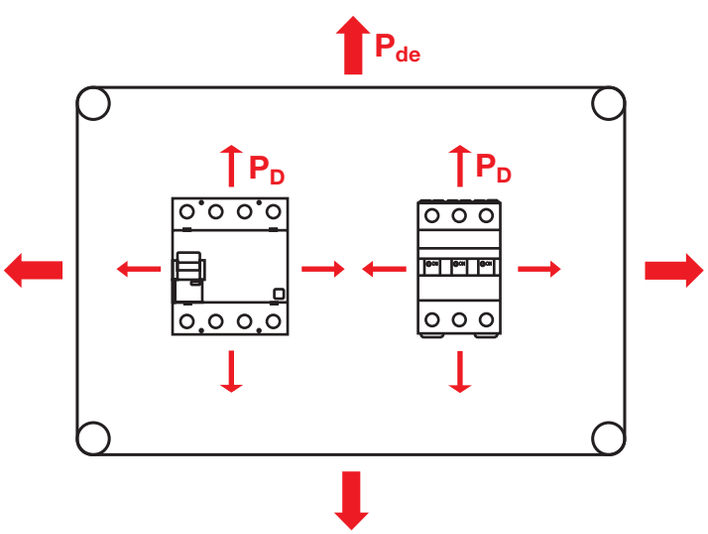
This ensures that the inside of an enclosure is not heated inadmissibly at a defined installed power loss and guarantees the operative readiness and reliable performance of the built-in electrical equipment.

The power dissipation P_D of the electrical equipment is given in the technical data of the respective manufacturers. The power dissipation capability P_{de} of Hensel empty enclosures are given in the technical data of this catalogue.

A possible application for the power dissipation capability is the verification of temperature rise in accordance with IEC 61439-1, section 10.10.



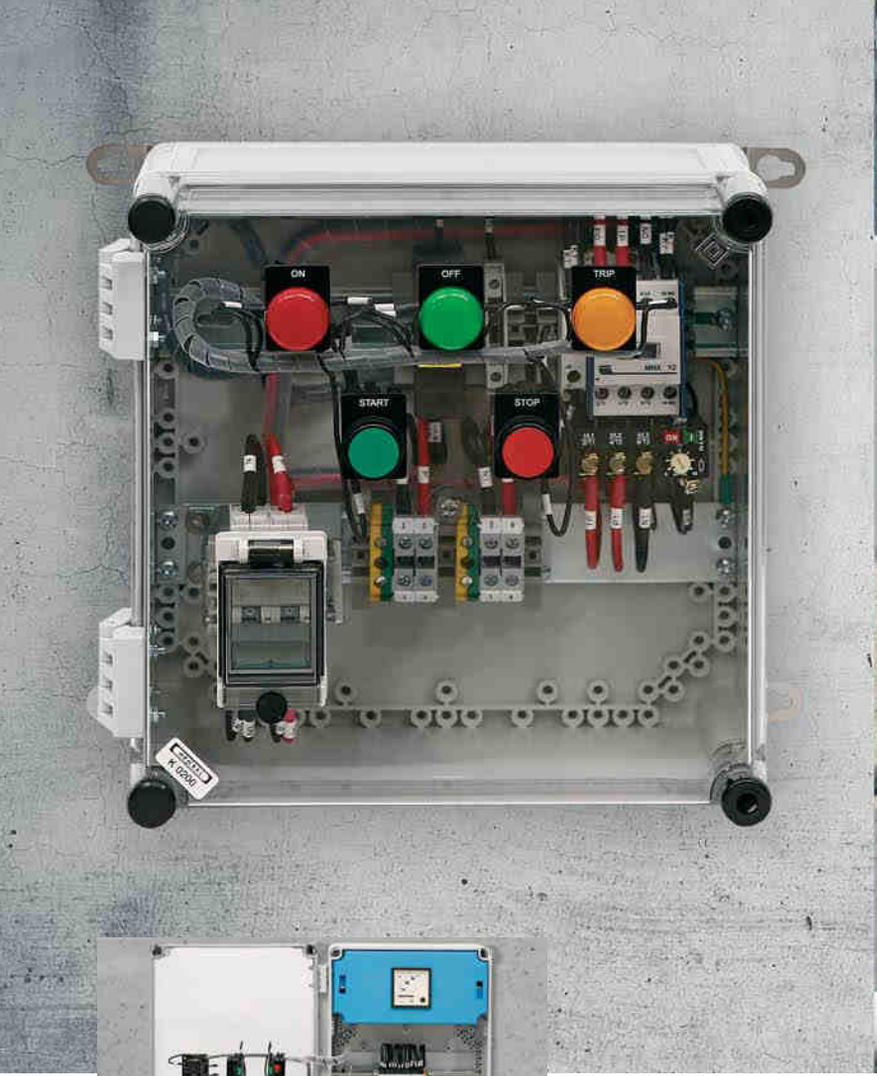
The temperature inside of enclosures rises by the flowing current and the power loss of the installed electrical equipment.

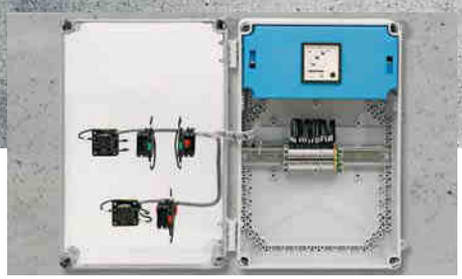


The enclosure with its power dissipation capability P_{de} has to be able to dissipate the power loss P_D of the installed electrical equipment inside of the enclosure without exceeding the limits of operating and ambient temperatures.

P_{de} = power dissipation capability

P_D = power dissipation





Empty enclosures in accordance with IEC 62208

For customized solutions and individual applications
Compliance with the safety requirements of the applicable product standard (e.g. IEC 61439-series) is the responsibility of the assembly manufacturer and not of the enclosure manufacturer.

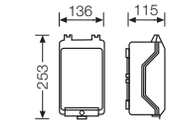
- For example for low-voltage switchgear and controlgear assemblies in accordance with IEC 61439-series
- For the installation of devices that must be operated externally, such as plug devices, push buttons and switches
- Installation of electrical equipment via DIN rails or mounting plates
- Cable entry via metric knockouts respectively by drilling individually using ESM grommets or AKM cable glands, see index cable entry systems
- Fasteners for tool operation as standard
- Screws made of stainless steel V2A
- Hinges for lids available for operating installation devices within a large area
- Material: PS polystyrene or PC polycarbonate
- Burning behaviour: Glow wire test in accordance with IEC 60695-2-11: 750 °C / 960 °C,
  flame-retardant, self-extinguishing
- Empty enclosures are equipment with protection class II, ⧈ in accordance with IEC 61439-1, section 8.4.4
- Degree of protection: IP 55, IP 65 with cable glands
- Colour: grey, RAL 7035

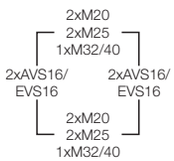
Empty enclosures in accordance with IEC 62208

for customized solutions and individual applications
Cable entry via metric knockouts

KG 9001

Built-in dimensions W 101 x H 205 x D 95 mm



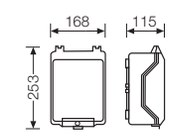


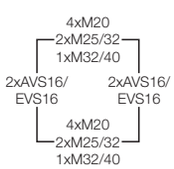
- degree of protection: IP 55 (ESM), IP 65 (see index cable entry systems)
- for installation equipment on DIN rails or mounting plates (order separately)
- max. installation depth with built-in mounting plate 95 mm, with built-in DIN rail 89 mm
- with transparent hinged lid
- fastener for tool operation
- sealable
- cable entry via metric knockouts
- included cable entry:
  2 ESM 25, sealing range Ø 9-17 mm and
  1 ESM 32, sealing range Ø 9-23 mm

rated insulation voltage	U_i = 1000 V a.c.
impact strength	IK 08 (5 Joule)
static load	mounting plate or DIN rail = 1.3 kg lid = 1.2 kg
power dissipation capability at $\Delta\vartheta$ = 40 K	P_{de} = 16.5 watts
relative power dissipation capability in watts per K	P_{de} = 0.4125 watts per K

KG 9002

Built-in dimensions W 133 x H 205 x D 95 mm





- degree of protection: IP 55 (ESM), IP 65 (see index cable entry systems)
- for installation equipment on DIN rails or mounting plates (order separately)
- max. installation depth with built-in mounting plate 95 mm, with built-in DIN rail 89 mm
- please order DIN rails or mounting plates additionally
- with transparent hinged lid
- fastener for tool operation
- sealable
- cable entry via metric knockouts
- included cable entry:
  2 ESM 25, sealing range Ø 9-17 mm and
  1 ESM 32, sealing range Ø 9-23 mm

rated insulation voltage	U_i = 1000 V a.c.
impact strength	IK 08 (5 Joule)
static load	mounting plate or DIN rail = 1.6 kg lid = 1.2 kg
power dissipation capability at $\Delta\vartheta$ = 40 K	P_{de} = 16.8 watts
relative power dissipation capability in watts per K	P_{de} = 0.42 watts per K

Application:

KG empty enclosures with transparent lid

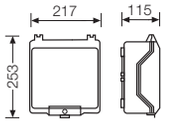
KG empty enclosures with opaque lid

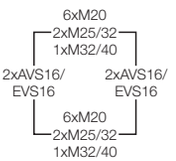
Empty enclosures in accordance with IEC 62208

for customized solutions and individual applications
Cable entry via metric knockouts

KG 9003

Built-in dimensions W 182 x H 205 x D 95 mm





- degree of protection: IP 55 (ESM),
  IP 65 (see index cable entry systems)
- for installation equipment on DIN rails or mounting plates (order separately)
- max. installation depth with built-in mounting plate 95 mm, with built-in DIN rail 89 mm
- please order DIN rails or mounting plates additionally
- with transparent hinged lid
- fastener for tool operation
- sealable
- cable entry via metric knockouts
- included cable entry:
  2 ESM 25, sealing range Ø 9-17 mm and
  1 ESM 32, sealing range Ø 9-23 mm

rated insulation voltage	U_i = 1000 V a.c.
impact strength	IK 08 (5 Joule)
static load	mounting plate or DIN rail = 1.6 kg lid = 1.6 kg
power dissipation capability at $\Delta\vartheta$ = 40 K	P_{de} = 17.6 watts
relative power dissipation capability in watts per K	P_{de} = 0.44 watts per K

Application

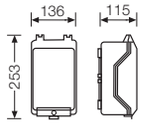
Application

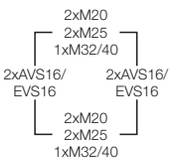
Empty enclosures in accordance with IEC 62208

for customized solutions and individual applications
Cable entry via metric knockouts

KG 9001 IN

Built-in dimensions W 101 x H 205 x D 95 mm



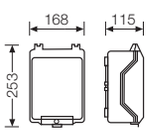


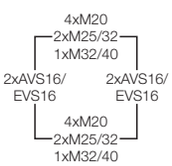
- degree of protection: IP 55 (ESM),
  IP 65 (see index cable entry systems)
- for installation equipment on DIN rails or mounting plates (order separately)
- max. installation depth with built-in mounting plate 95 mm, with built-in DIN rail 89 mm
- with opaque hinged lid
- fastener for tool operation
- sealable
- cable entry via metric knockouts
- included cable entry:
  2 ESM 25, sealing range Ø 9-17 mm and
  1 ESM 32, sealing range Ø 9-23 mm

rated insulation voltage	U_i = 1000 V a.c.
impact strength	IK 08 (5 Joule)
static load	mounting plate or DIN rail = 1.3 kg lid = 1.2 kg
power dissipation capability at $\Delta\vartheta$ = 40 K	P_{de} = 16.5 watts
relative power dissipation capability in watts per K	P_{de} = 0.4125 watts per K

KG 9002 IN

Built-in dimensions W 133 x H 205 x D 95 mm





- degree of protection: IP 55 (ESM),
  IP 65 (see index cable entry systems)
- for installation equipment on DIN rails or mounting plates (order separately)
- max. installation depth with built-in mounting plate 95 mm, with built-in DIN rail 89 mm
- with opaque hinged lid
- fastener for tool operation
- sealable
- cable entry via metric knockouts
- included cable entry:
  2 ESM 25, sealing range Ø 9-17 mm and
  1 ESM 32, sealing range Ø 9-23 mm

rated insulation voltage	U_i = 1000 V a.c.
impact strength	IK 08 (5 Joule)
static load	mounting plate or DIN rail = 1.6 kg lid = 1.2 kg
power dissipation capability at $\Delta\vartheta$ = 40 K	P_{de} = 16.8 watts
relative power dissipation capability in watts per K	P_{de} = 0.42 watts per K

Application:

KG empty enclosures with transparent lid

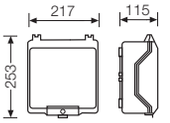
KG empty enclosures with opaque lid

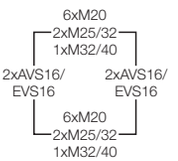
Empty enclosures in accordance with IEC 62208

for customized solutions and individual applications
Cable entry via metric knockouts

KG 9003 IN

Built-in dimensions W 182 x H 205 x D 95 mm





- degree of protection: IP 55 (ESM),
  IP 65 (see index cable entry systems)
- for installation equipment on DIN rails or mounting plates (order separately)
- max. installation depth with built-in mounting plate 95 mm, with built-in DIN rail 89 mm
- with opaque hinged lid
- fastener for tool operation
- sealable
- cable entry via metric knockouts
- included cable entry:
  2 ESM 25, sealing range Ø 9-17 mm and
  1 ESM 32, sealing range Ø 9-23 mm

rated insulation voltage	U_i = 1000 V a.c.
impact strength	IK 08 (5 Joule)
static load	mounting plate or DIN rail = 1.6 kg lid = 1.6 kg
power dissipation capability at $\Delta\vartheta$ = 40 K	P_{de} = 17.6 watts
relative power dissipation capability in watts per K	P_{de} = 0.44 watts per K

Application

Application

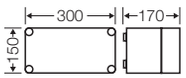
Empty enclosures in accordance with IEC 62208

for customized solutions and individual applications
box walls without knockouts

K 0100

Built-in dimensions W 275 x H 125 x D 150 mm

IP 65



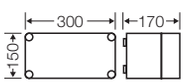
- enclosure size 1, type Mi
- for installation equipment on DIN rails or mounting plates (order separately)
- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- with transparent lid
- lid fasteners for tool operation
- sealable
- box walls without knockouts
- optional hinges for device installation in the lid
- external brackets for wall fixing as accessories

rated insulation voltage	U_i = 690 V a.c. / 1000 V d.c.
impact strength	IK 08 (5 Joule)
static load	mounting plate or DIN rail = 3.2 kg lid = 1.3 kg
power dissipation capability at $\Delta\vartheta$ = 40 K	P_{de} = 33 watts
relative power dissipation capability in watts per K	P_{de} = 0.825 watts per K

K 0101

Built-in dimensions W 275 x H 125 x D 150 mm

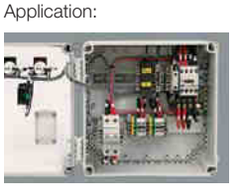
IP 65



- enclosure size 1, type Mi
- for installation equipment on DIN rails or mounting plates (order separately)
- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- with opaque lid
- lid fasteners for tool operation
- sealable
- box walls without knockouts
- optional hinges for device installation in the lid
- external brackets for wall fixing as accessories

rated insulation voltage	U_i = 690 V a.c. / 1000 V d.c.
impact strength	IK 08 (5 Joule)
static load	mounting plate or DIN rail = 3.2 kg lid = 1.3 kg
power dissipation capability at $\Delta\vartheta$ = 40 K	P_{de} = 33 watts
relative power dissipation capability in watts per K	P_{de} = 0.825 watts per K

Application:



Empty enclosures with installed equipment on DIN rail and mounting plate

DIN rails for equipment or terminals with clip-on mounting

Mounting plates

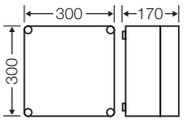
Empty enclosures in accordance with IEC 62208

for customized solutions and individual applications
box walls without knockouts

K 0200

Built-in dimensions W 275 x H 275 x D 150 mm

IP 65



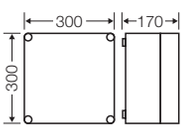
- enclosure size 2, type Mi
- for installation equipment on DIN rails or mounting plates (order separately)
- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- with transparent lid
- lid fasteners for tool operation
- sealable
- box walls without knockouts
- optional hinges for device installation in the lid
- external brackets for wall fixing as accessories

rated insulation voltage	U_i = 690 V a.c. / 1000 V d.c.
impact strength	IK 08 (5 Joule)
static load	mounting plate or DIN rail = 6.5 kg lid = 1.6 kg
power dissipation capability at $\Delta\vartheta$ = 40 K	P_{de} = 53 watts
relative power dissipation capability in watts per K	P_{de} = 1.325 watts per K

K 0201

Built-in dimensions W 275 x H 275 x D 150 mm

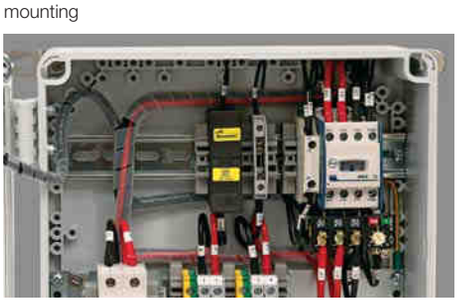
IP 65



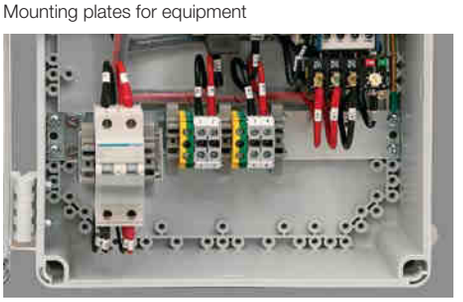
- enclosure size 2, type Mi
- for installation equipment on DIN rails or mounting plates (order separately)
- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- with opaque lid
- lid fasteners for tool operation
- sealable
- box walls without knockouts
- optional hinges for device installation in the lid
- external brackets for wall fixing as accessories

rated insulation voltage	U_i = 690 V a.c. / 1000 V d.c.
impact strength	IK 08 (5 Joule)
static load	mounting plate or DIN rail = 6.5 kg lid = 1.6 kg
power dissipation capability at $\Delta\vartheta$ = 40 K	P_{de} = 53 watts
relative power dissipation capability in watts per K	P_{de} = 1.325 watts per K

DIN rails for equipment or terminals with clip-on mounting



Mounting plates for equipment



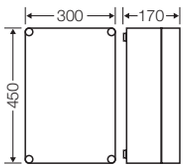
Empty enclosures in accordance with IEC 62208

for customized solutions and individual applications
box walls without knockouts

K 0300

Built-in dimensions W 275 x H 425 x D 150 mm

IP 65



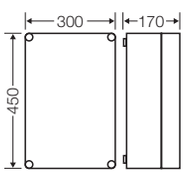
- enclosure size 3, type Mi
- for installation equipment on DIN rails or mounting plates (order separately)
- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- with transparent lid
- lid fasteners for tool operation
- sealable
- box walls without knockouts
- optional hinges for device installation in the lid
- external brackets for wall fixing as accessories

rated insulation voltage	U_i = 690 V a.c. / 1000 V d.c.
impact strength	IK 08 (5 Joule)
static load	mounting plate or DIN rail = 9.2 kg lid = 3.2 kg
power dissipation capability at $\Delta\vartheta$ = 40 K	P_{de} = 71 watts
relative power dissipation capability in watts per K	P_{de} = 1.775 watts per K

K 0301

Built-in dimensions W 275 x H 425 x D 150 mm

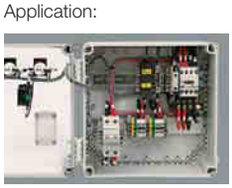
IP 65



- enclosure size 3, type Mi
- for installation equipment on DIN rails or mounting plates (order separately)
- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- with opaque lid
- lid fasteners for tool operation
- sealable
- box walls without knockouts
- optional hinges for device installation in the lid
- external brackets for wall fixing as accessories

rated insulation voltage	U_i = 690 V a.c. / 1000 V d.c.
impact strength	IK 08 (5 Joule)
static load	mounting plate or DIN rail = 9.2 kg lid = 3.2 kg
power dissipation capability at $\Delta\vartheta$ = 40 K	P_{de} = 71 watts
relative power dissipation capability in watts per K	P_{de} = 1.775 watts per K

Application:



Empty enclosures with installed equipment on DIN rail and mounting plate

DIN rails for equipment or terminals with clip-on mounting

Mounting plates

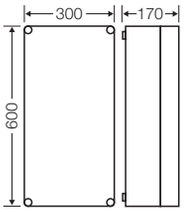
Empty enclosures in accordance with IEC 62208

for customized solutions and individual applications
box walls without knockouts

K 0400

Built-in dimensions W 275 x H 575 x D 150 mm

IP 65



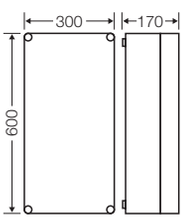
- enclosure size 4, type Mi
- for installation equipment on DIN rails or mounting plates (order separately)
- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- with transparent lid
- lid fasteners for tool operation
- sealable
- box walls without knockouts
- optional hinges for device installation in the lid
- external brackets for wall fixing as accessories

rated insulation voltage	U_i = 690 V a.c. / 1000 V d.c.
impact strength	IK 08 (5 Joule)
static load	mounting plate or DIN rail = 9.2 kg lid = 3.2 kg
power dissipation capability at $\Delta\vartheta$ = 40 K	P_{de} = 93 watts
relative power dissipation capability in watts per K	P_{de} = 2,325 watts per K

K 0401

Built-in dimensions W 275 x H 575 x D 150 mm

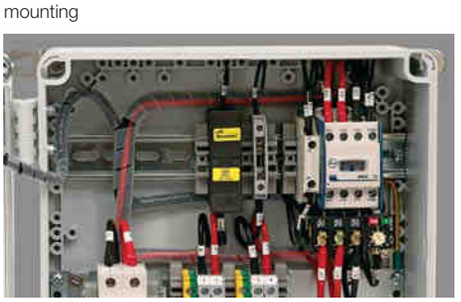
IP 65



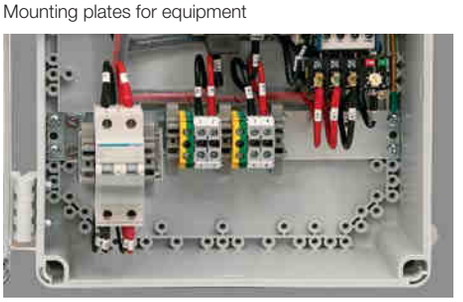
- enclosure size 4, type Mi
- for installation equipment on DIN rails or mounting plates (order separately)
- max. installation depth with built-in mounting plate 146 mm, with built-in DIN rail 135 mm
- with opaque lid
- lid fasteners for tool operation
- sealable
- box walls without knockouts
- optional hinges for device installation in the lid
- external brackets for wall fixing as accessories

rated insulation voltage	U_i = 690 V a.c. / 1000 V d.c.
impact strength	IK 08 (5 Joule)
static load	mounting plate or DIN rail = 9.2 kg lid = 3.2 kg
power dissipation capability at $\Delta\vartheta$ = 40 K	P_{de} = 93 watts
relative power dissipation capability in watts per K	P_{de} = 2,325 watts per K

DIN rails for equipment or terminals with clip-on mounting



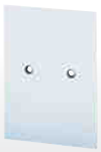
Mounting plates for equipment



Empty enclosures in accordance with IEC 62208

Accessories

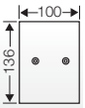
KG empty enclosures: DIN rails, mounting plates, PE/N terminals	388
K empty enclosures: DIN rails, mounting plates	389 - 390
Converting sets for lid operation or sealing	391
Locking device insertion, lid locks, triangle lid fastener, triangle key	391
Hinges for lids	392



KG MP 01

Mounting plate for KG 9001

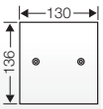
- material laminated paper, coated
- material thickness 4 mm
- with fixing screws



KG MP 02

Mounting plate for KG 9002

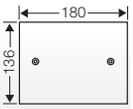
- material laminated paper, coated
- material thickness 4 mm
- with fixing screws

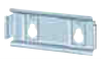


KG MP 03

Mounting plate for KG 9003

- material laminated paper, coated
- material thickness 4 mm
- with fixing screws

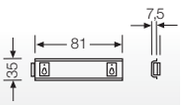




KG TS 01

DIN rail for KG 9001

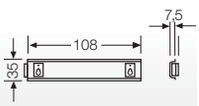
- in accordance with DIN EN 60715
- for equipment or terminals with clip-on mounting
- with fixing screws



KG TS 02

DIN rail for KG 9002

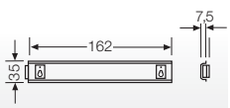
- in accordance with DIN EN 60715
- for equipment or terminals with clip-on mounting
- with fixing screws



KG TS 03

DIN rail for KG 9003

- in accordance with DIN EN 60715
- for equipment or terminals with clip-on mounting
- with fixing screws



KG PN 01

PE and N terminal

- for KG 9001
- per PE/N number x cross section 3 x 25 mm², 3 x 4 mm² Cu, screw-type terminal

rated insulation voltage	U_i = 400 V a.c.

KG PN 02

PE and N terminal

- for KG 9002
- PE+N x cross section 3 x 25 mm², 5 x 4 mm² Cu, screw-type terminal

rated insulation voltage	U_i = 400 V a.c.

KG PN 03

PE and N terminal

- for KG 9003
- per PE/N number x cross section 4 x 25 mm², 7 x 4 mm² Cu, screw-type terminal

rated insulation voltage	U_i = 400 V a.c.

Empty enclosures in accordance with IEC 62208
Accessories

Mi TS 15

DIN rail
length 134 mm

- in accordance with DIN EN 60715
- for Mi-Empty boxes sizes 1, 6
- for equipment or terminals with clip-on mounting
- with fixing screws

Mi TS 30

DIN rail
length 284 mm

- in accordance with DIN EN 60715
- for Mi-Empty boxes sizes 1, 2, 3, 4, 6, 8
- for equipment or terminals with clip-on mounting
- with fixing screws

Mi TS 45

DIN rail
length 434 mm

- in accordance with DIN EN 60715
- for Mi-Empty boxes sizes 3, 6
- for equipment or terminals with clip-on mounting
- with fixing screws

Mi TS 60

DIN rail
length 584 mm

- in accordance with DIN EN 60715
- for Mi-Empty boxes sizes 4, 6, 8
- for equipment or terminals with clip-on mounting
- with fixing screws

Application:

DIN rails for equipment or terminals with clip-on mounting

Empty enclosures in accordance with IEC 62208
Accessories

Mi MP 1

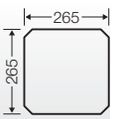
Mounting plate
W 259 x H 115 mm

- material thickness 4 mm
- for Mi-Empty boxes sizes 1, 2, 3, 4, 6
- with fixing screws

Mi MP 2

Mounting plate
W 265 x H 265 mm

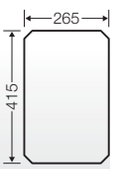
- material thickness 4 mm
- for Mi-Empty boxes sizes 2, 3, 4, 6, 8
- with fixing screws



Mi MP 3

Mounting plate
W 265 x H 415 mm

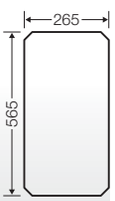
- material thickness 4 mm
- for Mi-Empty boxes sizes 3, 4, 6
- with fixing screws



Mi MP 4

Mounting plate
W 265 x H 565 mm

- material thickness 4 mm
- for Mi-Empty boxes sizes 4, 6, 8
- with fixing screws



Application:

Mounting plates

Mi PL 2

Sealing cap

- 2 sealing caps for converting the lid fasteners

Mi SR 4

Conversion set
for manual operation on tool operation

- 4 fastening covers

Mi SN 4

Conversion set
for converting lid fasteners from tool to manual operation

- 4 manual actuators

Mi DV 01

Locking device insertion

- only in connection with Mi PL 2, Mi SR 4 or Mi SN 4

Mi ZS 11

Lid lock
with locking device I
for Mi boxes sizes 1 to 6

- Is being used instead of fasteners for hand or tool operation in order to prevent unauthorised opening of the lids
- consisting of: cylinder lock, keys, locking device insertion, dust cover

Mi ZS 12

Lid lock
with locking device II
for Mi boxes sizes 1 to 6

- Is being used instead of fasteners for hand or tool operation in order to prevent unauthorised opening of the lids
- consisting of: cylinder lock, keys, locking device insertion, dust cover

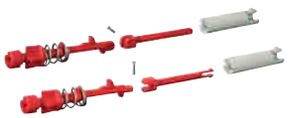
Mi DR 04

Lid fastener for tool operation
triangle 8 mm

- is used instead of fasteners for hand- or tool operation, in order to make unauthorized opening of lids more difficult
- 4 locking devices with triangle 8 mm and key

DS 1

Triangular key 8 mm



Mi ZS 20

Mi hinge for lids
for Mi boxes sizes 1, 2, 3, 4

- For operating installation device within a large area. The lid keeps permanently connected to the box.
- When assembling several boxes, the insertion can only be carried out for the external boxes.

Mi ZS 30

Hinge for lids

- for empty boxes K 0xxx
- with lamellar plugs for 2 lid fixing tubes
- The lid keeps permanently connected to the box

Mi ZS 40

Mi hinge for lids
for Mi boxes sizes 1 to 8

- For operating installation device within a large area. The lid keeps permanently connected to the box.
- Wall connectors or flanges are necessary for assembly
- Not applicable in boxes with covers

Mi ZS 60

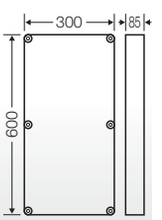
Mi hinge for lids
for Mi boxes sizes 4 and 8 with extension frame

- For operating installation device within a large area. The lid keeps permanently connected to the box.
- Wall connectors or flanges are necessary for assembly
- Not applicable in boxes with covers

Mi ZR 4

Extension frame
for enclosure size 4

- for extension of the installation depth by 85 mm
- degree of protection IP 65 is maintained with use of up to two extension frames
- inclusive fixing material



Application:

Mi hinges for lids enable to operate installation devices within a large area

Empty enclosures in accordance with IEC 62208

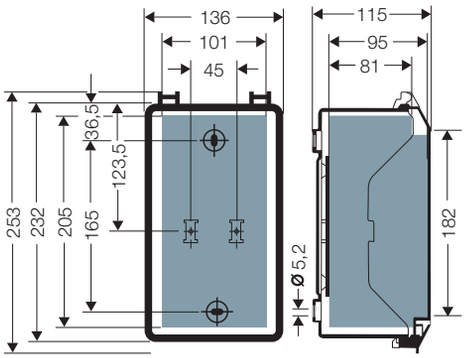
Technical details

Dimensions in mm	394 - 395
Power dissipation	396
Operating and ambient conditions	397

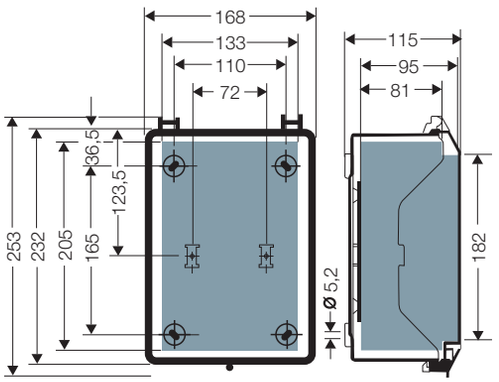
Empty enclosures in accordance with IEC 62208

Technical details
Dimensions in mm

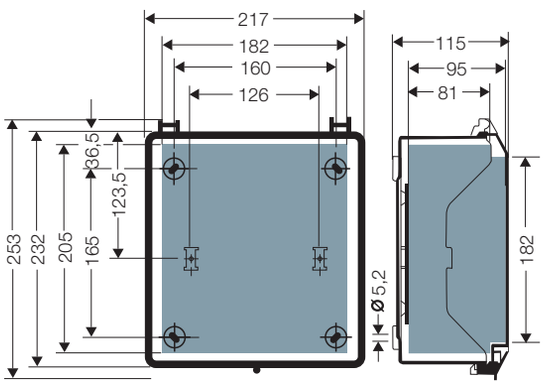
Dimensions of the interior installation depth with installed mounting plates.



KG 9001
KG 9001 IN



KG 9002
KG 9002 IN



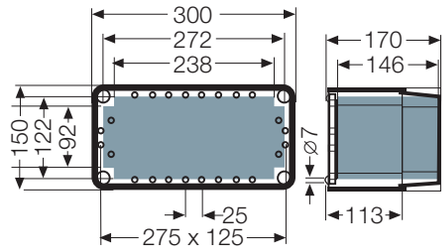
KG 9003
KG 9003 IN

= usable installation space with mounted cable glands

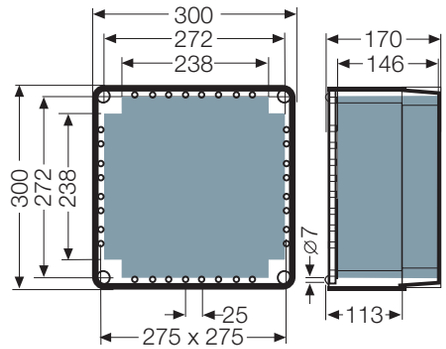
Empty enclosures in accordance with IEC 62208

Technical details
Dimensions in mm

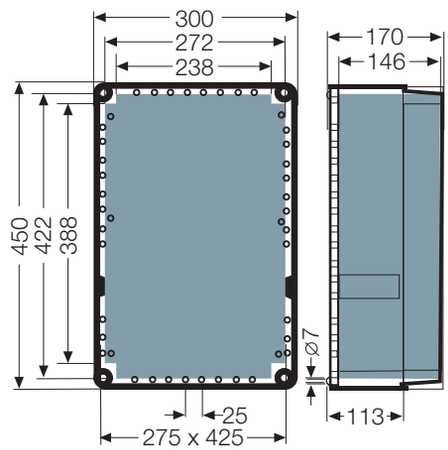
Dimensions of the interior installation depth with installed mounting plates.



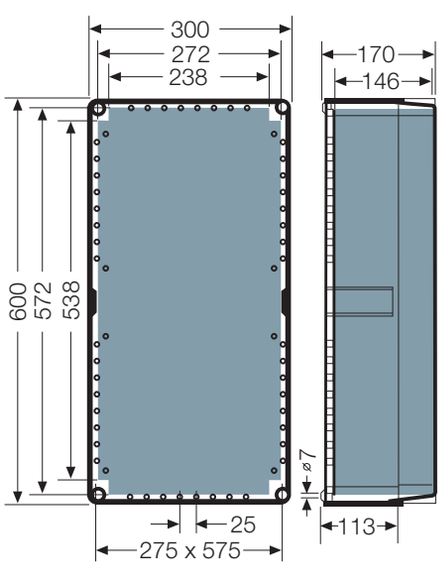
K 0100
K 0101



K 0200
K 0201



K 0300
K 0301



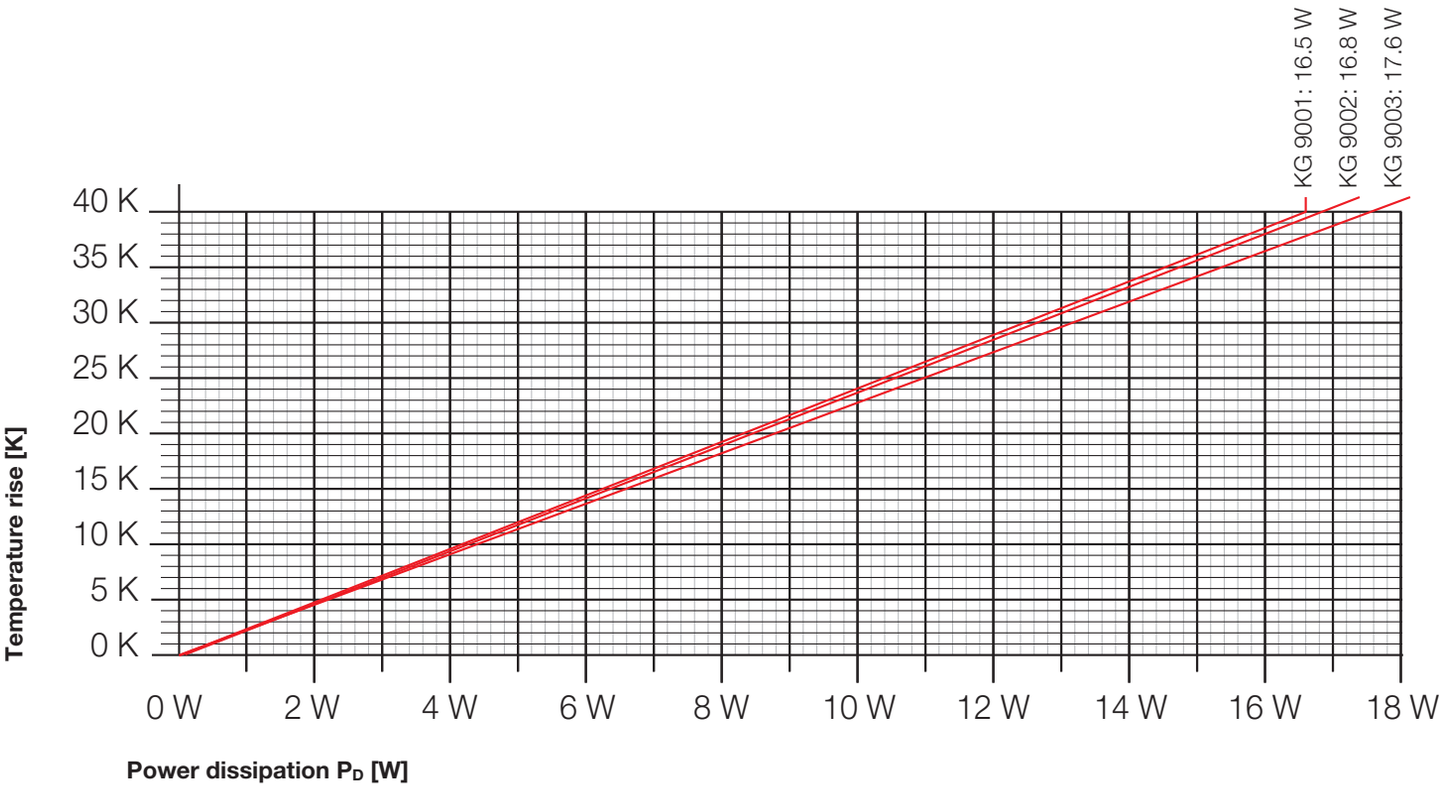
K 0400
K 0401

= usable installation space with mounted cable glands

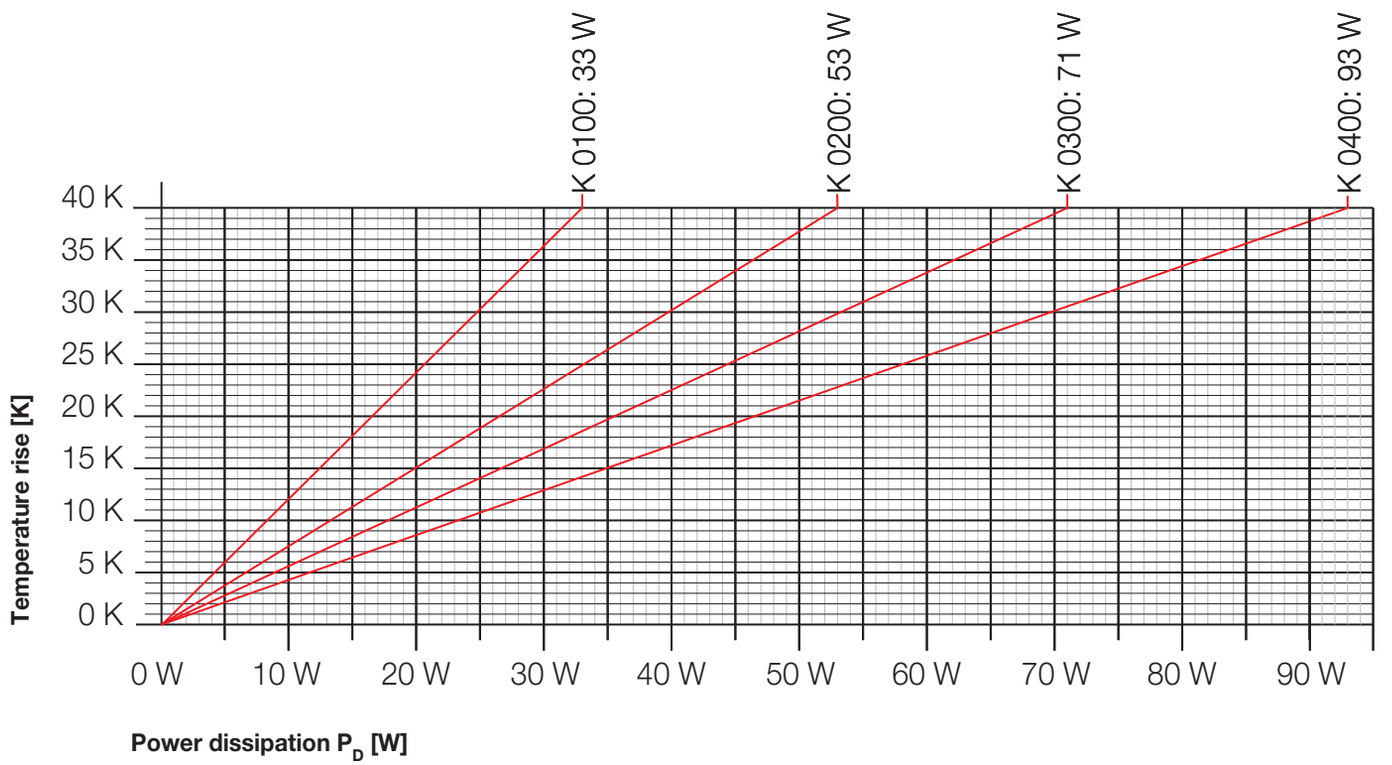
Empty enclosures in accordance with IEC 62208

Technical details
Power dissipation

KG empty enclosures: temperature rise (Δϑ) by power dissipaton of electrical devices



K empty enclosures: temperature rise (Δϑ) by power dissipaton of electrical devices



Power dissipation P_D [W]

Empty enclosures in accordance with IEC 62208

Techical details
Operating and ambient conditions

	Empty enclosures KG	Empty enclosures K ....
Application area	**Suitable for indoor installation and outdoor installation, protected against weather influences** However, pay attention to the climatic effects on the installed equipment , for example, high or low ambient temperatures or formation of condensed water see technical information	
Ambient temperature - Average value over 24 hours - Maximum value - Minimum value	 +35 °C +40 °C -25 °C	 +35 °C +40 °C -25 °C
Relative humidity - short-time	– –	50% at 40 °C 100% at 25 °C
Fire protection in the event of internal faults	Demands placed on electrical devices from standards and laws: Minimum requirements - Glow wire test in accordance with IEC 60695-2-11: - (650 ± 15) °C for boxes and cable glands	
Burning behaviour - Glow wire test IEC 60 695-2-11 - UL Subject 94	 750 °C V-2 flame-retardant self-extinguishing	 960 °C V-2 flame-retardant self-extinguishing
Degree of protection against mechanical load	IK 08 (5 Joule)	IK 08 (5 Joule)
Toxic behaviour	halogen-free [1] silicone-free	halogen-free [1] silicone-free
	[1] “Halogen-free” in accordance with IEC 60754-2“ Common test methods for cables - Determination of the amount of halogen acid gas”. **For material properties see Technical details.**	

Cable entry systems

Grommets ESM, IP 54
for knockouts M 16 to M 40 400

Stepped grommets STM, IP 55
for knockouts M 16 to M 40 401

Grommets EDK , IP 65
for knockouts M 16 to M 40 402

Grommets EDR for conduits , IP 65
for knockouts M 16 to M 40 403

Cable glands AKM, IP 66/67
for knockouts M 12 to M 63 404 - 405

Cable glands ASS, IP 66/67
for knockouts M 12 to M 63 406 - 407

Combi climate glands, IP 66/67
for knockouts M 20 to M 40 408 - 412
Sealing plug VSB 413

Pressure compensation element 414

Stepped grommet, flange, cable retention 415

Outside diameter of conventional cable cross sections,
assignment of cable outside diameters to cable entries 416

Cable glands AKS, IP 65
for knockouts Pg 9 to Pg 48 417 - 418

Technical Details 419 - 421

Further technical information can be found on the Internet
www.hensel-electric.de -> Products

ESM 16

Grommets
for knockouts M 16

IP 55

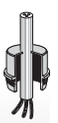
- sealing range: Ø 4.8-11 mm
- bore-hole: Ø 16.5 mm
- wall thickness 1.5-3.5 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C
- Colour: grey, RAL 7035

ESM 20

Grommets
for knockouts M 20

IP 55

- sealing range: Ø 6-13 mm
- bore-hole: Ø 20.5 mm
- wall thickness 1.5-3.5 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C
- Colour: grey, RAL 7035

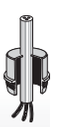


ESM 25

Grommets
for knockouts M 25

IP 55

- sealing range: Ø 9-17 mm
- bore-hole: Ø 25.5 mm
- wall thickness 1.5-3.5 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C
- Colour: grey, RAL 7035

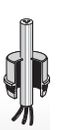


ESM 32

Grommets
for knockouts M 32

IP 55

- sealing range: Ø 9-23 mm
- bore-hole: Ø 32.5 mm
- wall thickness 1.5-3.5 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C
- Colour: grey, RAL 7035



ESM 40

Grommets
for knockouts M 40

IP 55

- sealing range: Ø 17-30 mm
- bore-hole: Ø 40.5 mm
- wall thickness 1.5-3.5 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C
- Colour: grey, RAL 7035

STM 16

Stepped grommet for knockouts M 16

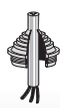
IP 55

- sealing range: Ø 3.5-12 mm
- bore-hole: Ø 16.5 mm
- wall thickness 1.5-4 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C
- Colour: grey, RAL 7035

STM 20

Stepped grommet for knockouts M 20

IP 55

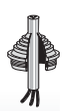


- sealing range: Ø 5-16 mm
- bore-hole: Ø 20.5 mm
- wall thickness 1.5-4 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C
- Colour: grey, RAL 7035

STM 25

Stepped grommet for knockouts M 25

IP 55

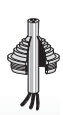


- sealing range: Ø 5-21 mm
- bore-hole: Ø 25.5 mm
- wall thickness 1.5-4 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C
- Colour: grey, RAL 7035

STM 32

Stepped grommet for knockouts M 32

IP 55

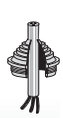


- sealing range: Ø 13-26.5 mm
- bore-hole: Ø 32.5 mm
- wall thickness 1.5-4 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C
- Colour: grey, RAL 7035

STM 40

Stepped grommet for knockouts M 40

IP 55



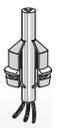
- sealing range: Ø 13-34 mm
- bore-hole: Ø 40.5 mm
- wall thickness 1.5-4 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C
- Colour: grey, RAL 7035

EDK 16

Grommets
for knockouts M 16

IP 65

- sealing range: Ø 5-10 mm
- bore-hole: Ø 16.5 mm
- wall thickness 1.5-3.5 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C
- Colour: grey, RAL 7035

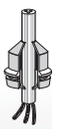


EDK 20

Grommets
for knockouts M 20

IP 65

- sealing range: Ø 6-13 mm
- bore-hole: Ø 20.5 mm
- wall thickness 1.5-3.5 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C
- Colour: grey, RAL 7035

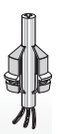


EDK 25

Grommets
for knockouts M 25

IP 65

- sealing range: Ø 9-17 mm
- bore-hole: Ø 25.5 mm
- wall thickness 1.5-3.5 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C
- Colour: grey, RAL 7035

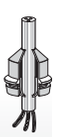


EDK 32

Grommets
for knockouts M 32

IP 65

- sealing range: Ø 8-23 mm
- bore-hole: Ø 32.5 mm
- wall thickness 1.5-3.5 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C
- Colour: grey, RAL 7035

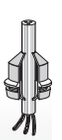


EDK 40

Grommets
for knockouts M 40

IP 65

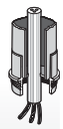
- sealing range:Ø 11-30 mm
- bore-hole: Ø 40.5 mm
- wall thickness 1.5-3.5 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C
- Colour: grey, RAL 7035



EDR 16

Grommets for conduits for knockouts M 16

IP 65

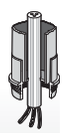


- conduit connection M 16
- bore-hole: Ø 16.5 mm
- wall thickness 1.5-3.2 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C
- Colour: grey, RAL 7035

EDR 20

Grommets for conduits for knockouts M 20

IP 65

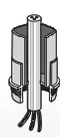


- conduit connection M 20
- bore-hole: Ø 20.5 mm
- wall thickness 1.5-3.2 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C
- Colour: grey, RAL 7035

EDR 25

Grommets for conduits for knockouts M 25

IP 65

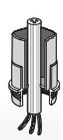


- conduit connection M 25
- bore-hole: Ø 25.5 mm
- wall thickness 1.5-3.2 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C
- Colour: grey, RAL 7035

EDR 32

Grommets for conduits for knockouts M 32

IP 65

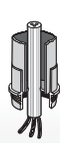


- conduit connection M 32
- bore-hole: Ø 32.5 mm
- wall thickness 1.5-3.2 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C
- Colour: grey, RAL 7035

EDR 40

Grommets for conduits for knockouts M 40

IP 65



- conduit connection M 40
- bore-hole: Ø 40.5 mm
- wall thickness 1.5-3.2 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C
- Colour: grey, RAL 7035

AKM 12

Cable glands for knockouts M 12

IP 66/67 IP 69

- sealing range: Ø 4-6 mm
- ISO thread M 12 x 1.5
- bore-hole:Ø 12.3 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2-11: 960 °C
- Colour: grey, RAL 7035

tightening torque	0,9 Nm

AKM 16

Cable glands for knockouts M 16

IP 66/67 IP 69

- sealing range: Ø 5-10 mm
- ISO thread M 16 x 1.5
- bore-hole: Ø 16.3 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2-11: 960 °C
- Colour: grey, RAL 7035

tightening torque	3.0 Nm

AKM 20

Cable glands for knockouts M 20

IP 66/67 IP 69

- sealing range Ø 6,5-13,5 mm
- ISO thread M 20 x 1.5
- bore-hole: Ø 20.3 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2-11: 960 °C
- Colour: grey, RAL 7035

tightening torque	4.0 Nm

AKM 25

Cable glands for knockouts M 25

IP 66/67 IP 69

- sealing range Ø 11-17 mm
- ISO thread M 25 x 1.5
- bore-hole: Ø 25.3 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2-11: 960 °C
- Colour: grey, RAL 7035

tightening torque	7,5 Nm

AKM 32

Cable glands for knockouts M 32

IP 66/67 IP 69

- sealing range Ø 15-21 mm
- ISO thread M 32 x 1.5
- bore-hole: Ø 32.3 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2-11: 960 °C
- Colour: grey, RAL 7035

tightening torque	10,0 Nm

AKM 40

Cable glands for knockouts M 40

IP 66/67 IP 69

- sealing range: Ø 19-28 mm
- ISO thread M 40 x 1.5
- bore-hole: Ø 40.3 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2-11: 960 °C
- Colour: grey, RAL 7035

tightening torque	10,0 Nm

AKM 50

Cable glands for knockouts M 50

IP 66/67 IP 69

- sealing range: Ø 27-35 mm
- ISO thread M 50 x 1.5
- bore-hole: Ø 50.3 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2-11: 960 °C
- Colour: grey, RAL 7035

tightening torque	10,0 Nm

AKM 63

Cable glands for knockouts M 63

IP 66/67 IP 69

- sealing range: Ø 35-42 mm
- ISO thread M 63 x 1.5
- bore-hole: Ø 63.3 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2-11: 960 °C
- Colour: grey, RAL 7035

tightening torque	10,0 Nm

ASS 12

Cable glands for knockouts M 12

IP 66/67 IP 69

- sealing range: Ø 2-5 mm
- ISO thread M 12 x 1.5
- bore-hole:Ø 12.3 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2: 960 °C
- colour: black, RAL 9005

tightening torque	0,9 Nm

ASS 16

Cable glands for knockouts M 16

IP 66/67 IP 69

- sealing range: Ø 3-10 mm
- ISO thread M 16 x 1.5
- bore-hole: Ø 16.3 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2: 960 °C
- colour: black, RAL 9005

tightening torque	3.0 Nm

ASS 20

Cable glands or knockouts M 20

IP 66/67 IP 69

- sealing range: Ø 5-13 mm
- ISO thread M 20 x 1.5
- bore-hole: Ø 20.3 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2: 960 °C
- colour: black, RAL 9005

tightening torque	4.0 Nm

ASS 25

Cable glands for knockouts M 25

IP 66/67 IP 69

- sealing range: Ø 8-17 mm
- ISO thread M 25 x 1.5
- bore-hole: Ø 25.3 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2: 960 °C
- colour: black, RAL 9005

tightening torque	7,5 Nm

ASS 32

Cable glands for knockouts M 32

IP 66/67 IP 69

- sealing range: Ø 12-21 mm
- ISO thread M 32 x 1.5
- bore-hole: Ø 32.3 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2: 960 °C
- colour: black, RAL 9005

tightening torque	10,0 Nm

ASS 40

Cable glands for knockouts M 40

IP 66/67 IP 69

- sealing range: Ø 16-28,5 mm
- ISO thread M 40 x 1.5
- bore-hole: Ø 40.3 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2: 960 °C
- colour: black, RAL 9005

tightening torque	10,0 Nm

ASS 50

Cable glands for knockouts M 50

IP 66/67 IP 69

- sealing range: Ø 21-35 mm
- ISO thread M 50 x 1.5
- bore-hole: Ø 50.3 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2: 960 °C
- colour: black, RAL 9005

tightening torque	10,0 Nm

ASS 63

Cable glands for knockouts M 63

IP 66/67 IP 69

- sealing range: Ø 20-48 mm
- ISO thread M 63 x 1.5
- bore-hole: Ø 63.3 mm
- wall thickness up to 3 mm
- with counter nut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2: 960 °C
- colour: black, RAL 9005

tightening torque	10,0 Nm

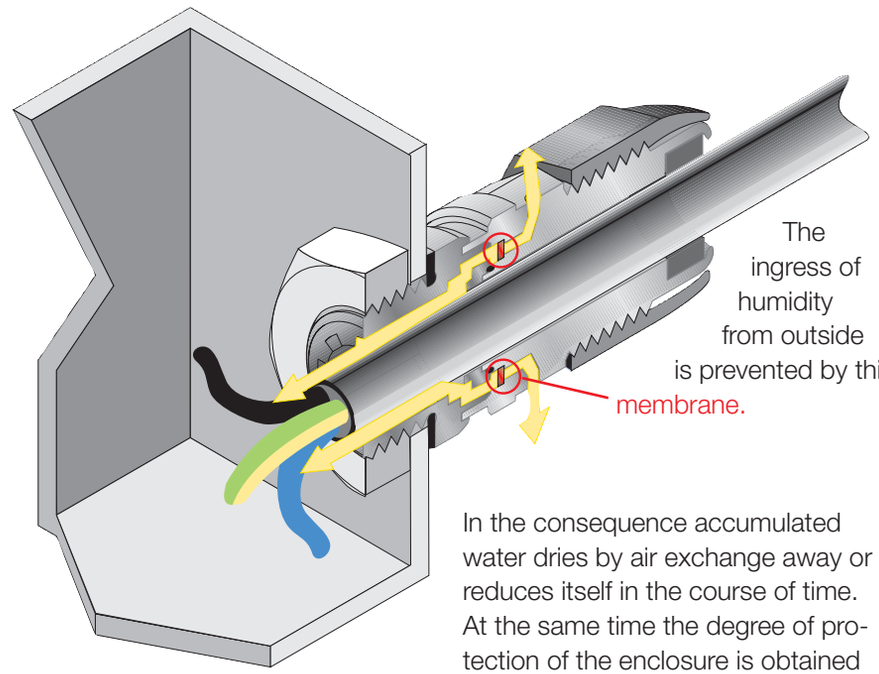
Ventilation and cable entry in one!
In general the formation of water in case of condensation in closed enclosures cannot be prevented in installation areas with high temperature differences!

The combi climate gland allows the cable entry and pressure compensation additionally.

Combi climate glands prevent accumulations of condensation, which can form among others by large temperature fluctuations, like changing weather, intensive solar irradiation etc., in enclosures with high degree of protection.

For adherence to the requested degree of protection the ventilation of the enclosure is effected via a special combi climate gland.

Via an inserted, breathable membrane combi climate glands ensure pressure compensation between enclosure interior and ambient air.



In the consequence accumulated water dries by air exchange away or reduces itself in the course of time. At the same time the degree of protection of the enclosure is obtained (up to IP 67)!

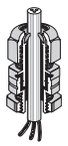
Your advantages with combi climate glands:

- **Cable entry and ventilation in one!**
- **Degree of protection of enclosure is obtained**

KBM 20

IP 66/67

Combi climate gland for knockouts M 20



- for the reduction of condensation by pressure compensation
- sealing range: Ø 6-13 mm
- ISO thread M 20 x 1.5
- bore-hole: Ø 20.5 mm
- wall thickness up to 3,5 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2: 960 °C
- In order not to exceed leakage limit of 0.07 bar with pressure compensation, one combi climate gland M20 must be used per 6 litres (6000 cm^3) of enclosure volume.
- Example: enclosure size 27 cm x 27 cm x 17 cm = 12393 cm^3 = 12,393 litres. Number of necessary combi climate glands M20 ≥ 3 pieces.
- When using different gland sizes the values for the enclosure volumes of the used combi climate glands can be added on.
- If the quantity of the necessary climate glands for pressure compensation is larger, than the number of necessary cable glands for cable entry, the unused climate glands can be sealed with sealing plugs.
- Colour: grey, RAL 7035

tightening torque	3.0 Nm

KBM 25

IP 66/67

Combi climate gland for knockouts M 25

- for the reduction of condensation by pressure compensation
- sealing range: Ø 9-17 mm
- ISO thread M 25 x 1.5
- bore-hole: Ø 25.5 mm
- wall thickness up to 3,5 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2: 960 °C
- In order not to exceed leakage limit of 0.07 bar with pressure compensation, one combi climate gland M25 must be used per 10 litres (10000 cm^3) of enclosure volume.
- Example: enclosure size 27 cm x 27 cm x 17 cm = 12393 cm^3 = 12,393 litres. Number of necessary combi climate glands M25 ≥ 2 pieces
- When using different gland sizes the values for the enclosure volumes of the used combi climate glands can be added on.
- If the quantity of the necessary climate glands for pressure compensation is larger, than the number of necessary cable glands for cable entry, the unused climate glands can be sealed with sealing plugs.
- Colour: grey, RAL 7035

tightening torque	4.0 Nm

Combi climate glands in application

KBM 32

IP 66/67

Combi climate gland for knockouts M 32

- for the reduction of condensation by pressure compensation
- sealing range: Ø 13-21 mm
- ISO thread M 32 x 1.5
- bore-hole: Ø 32.5 mm
- wall thickness up to 3,5 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2: 960 °C
- In order not to exceed leakage limit of 0.07 bar with pressure compensation, one combi climate gland M32 must be used per 12 litres (12000 cm^3) of enclosure volume.
- Example: enclosure size 27 cm x 27 cm x 17 cm = 12393 cm^3 = 12,393 litres.
  Number of necessary combi climate glands M32 ≥ 2 piece.
- When using different gland sizes the values for the enclosure volumes of the used combi climate glands can be added on.
- If the quantity of the necessary climate glands for pressure compensation is larger, than the number of necessary cable glands for cable entry, the unused climate glands can be sealed with sealing plugs.
- Colour: grey, RAL 7035

tightening torque	4.0 Nm

KBM 40

IP 66/67

Combi climate gland for knockouts M 40

- for the reduction of condensation by pressure compensation
- sealing range: Ø 16-28 mm
- ISO thread M 40 x 1.5
- bore-hole: Ø 40.5 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2: 960 °C
- In order not to exceed leakage limit of 0.07 bar with pressure compensation, one combi climate gland M40 must be used per 16 litres (16000 cm^3) of enclosure volume.
- Example: enclosure size 27 cm x 27 cm x 17 cm = 12393 cm^3 = 12.393 litres. Number of necessary KB. 40 (M40) ≥ 1 piece.
- When using different gland sizes the values for the enclosure volumes of the used combi climate glands can be added on.
- If the quantity of the necessary climate glands for pressure compensation is larger, than the number of necessary cable glands for cable entry, the unused climate glands can be sealed with sealing plugs.
- Colour: grey, RAL 7035

tightening torque	6.0 Nm

KBS 20

IP 66/67

Combi climate gland for knockouts M 20

- for the reduction of condensation by pressure compensation
- sealing range: Ø 6-13 mm
- ISO thread M 20 x 1.5
- bore-hole: Ø 20.5 mm
- wall thickness up to 3,5 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2: 960 °C
- In order not to exceed leakage limit of 0.07 bar with pressure compensation, one combi climate gland M20 must be used per 6 litres (6000 cm^3) of enclosure volume.
- Example: enclosure size 27 cm x 27 cm x 17 cm = 12393 cm^3 = 12,393 litres.
  Number of necessary combi climate glands M20 ≥ 3 pieces.
- When using different gland sizes the values for the enclosure volumes of the used combi climate glands can be added on.
- If the quantity of the necessary climate glands for pressure compensation is larger, than the number of necessary cable glands for cable entry, the unused climate glands can be sealed with sealing plugs.
- colour: black, RAL 9005

tightening torque	3.0 Nm

KBS 25

IP 66/67

Combi climate gland for knockouts M 25

- for the reduction of condensation by pressure compensation
- sealing range: Ø 9-17 mm
- ISO thread M 25 x 1.5
- bore-hole: Ø 25.5 mm
- wall thickness up to 3,5 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2: 960 °C
- In order not to exceed leakage limit of 0.07 bar with pressure compensation, one combi climate gland M25 must be used per 10 litres (10000 cm^3) of enclosure volume.
- Example: enclosure size 27 cm x 27 cm x 17 cm = 12393 cm^3 = 12,393 litres.
  Number of necessary combi climate glands M25 ≥ 2 pieces
- When using different gland sizes the values for the enclosure volumes of the used combi climate glands can be added on.
- If the quantity of the necessary climate glands for pressure compensation is larger, than the number of necessary cable glands for cable entry, the unused climate glands can be sealed with sealing plugs.
- colour: black, RAL 9005

tightening torque	4.0 Nm

Combi climate glands in application

KBS 32

Combi climate gland for knockouts M 32

IP 66/67

- for the reduction of condensation by pressure compensation
- sealing range: Ø 13-21 mm
- ISO thread M 32 x 1.5
- bore-hole: Ø 32.5 mm
- wall thickness up to 3,5 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2: 960 °C
- In order not to exceed leakage limit of 0.07 bar with pressure compensation, one combi climate gland M32 must be used per 12 litres (12000 cm^3) of enclosure volume.
- Example: enclosure size 27 cm x 27 cm x 17 cm = 12393 cm^3 = 12,393 litres.
  Number of necessary combi climate glands M32 ≥ 2 piece.
- When using different gland sizes the values for the enclosure volumes of the used combi climate glands can be added on.
- If the quantity of the necessary climate glands for pressure compensation is larger, than the number of necessary cable glands for cable entry, the unused climate glands can be sealed with sealing plugs.
- colour: black, RAL 9005

tightening torque	4.0 Nm

KBS 40

Combi climate gland for knockouts M 40

IP 66/67

- for the reduction of condensation by pressure compensation
- sealing range: Ø 16-28 mm
- ISO thread M 40 x 1.5
- bore-hole: Ø 40.5 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2: 960 °C
- In order not to exceed leakage limit of 0.07 bar with pressure compensation, one combi climate gland M40 must be used per 16 litres (16000 cm^3) of enclosure volume.
- Example: enclosure size 27 cm x 27 cm x 17 cm = 12393 cm^3 = 12.393 litres. Number of necessary KB. 40 (M40) ≥ 1 piece.
- When using different gland sizes the values for the enclosure volumes of the used combi climate glands can be added on.
- If the quantity of the necessary climate glands for pressure compensation is larger, than the number of necessary cable glands for cable entry, the unused climate glands can be sealed with sealing plugs.
- colour: black, RAL 9005

tightening torque	6.0 Nm

VSB 13

Sealing plug diameter 13 mm

- for sealing combi climate glands M20 or M25, which are not used for cable entry
- ambient temperature - 25 °C to + 55 °C
- colour: red, RAL 3000

VSB 21

Sealing plug diameter 21 mm

- for sealing combi climate glands M32 and M40, which are not used for cable entry
- ambient temperature - 25 °C to + 55 °C
- colour: red, RAL 3000

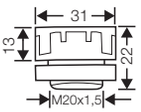
Application:

Combi climate glands in application

BM 20G

Pressure compensation element for M 20 knockouts

IP 54

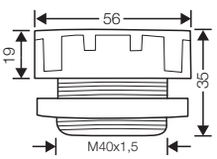


- for the reduction of condensation by pressure compensation in power distribution systems
- ISO thread M 20 x 1.5
- bore-hole: Ø 20.3 mm
- wall thickness up to 4 mm
- with counter nut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- In order not to exceed leakage limit of 0.07 bar with pressure compensation, one pressure compensation element BM 20G must be used per 28 litres (28000 cm³) of enclosure volume.
- Example:
  enclosure size 30 cm x 60 cm x 17 cm = 30600 cm³ = 30.6 litres.
  Number of necessary BM 20G (M32) = 2 piece.
- technical changes reserved
- Colour: grey, RAL 7035

BM 40G

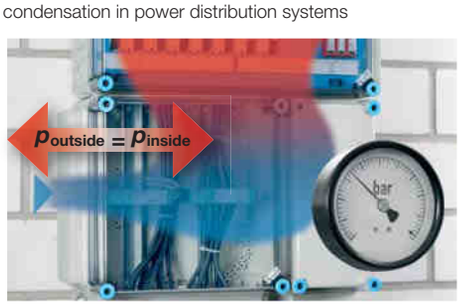
Pressure compensation element for M 40 knockouts

IP 54



- for the reduction of condensation by pressure compensation in power distribution systems
- ISO thread M 40 x 1.5
- bore-hole: Ø 40.3 mm
- wall thickness of up to 8 mm
- with counter nut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- In order not to exceed leakage limit of 0.07 bar with pressure compensation, one pressure compensation element BM 40G must be used per 122 litres (122000 cm³) of enclosure volume.
- Example:
  enclosure size 60 cm x 60 cm x 17 cm = 61200 cm³ = 61.2 litres.
  Number of necessary BM 40G (M40) = 1 piece.
- technical changes reserved
- Colour: grey, RAL 7035

Pressure compensation elements reduce condensation in power distribution systems



KST 70

Stepped grommet

IP 65

- sealing range: Ø 30-72 mm
- bore-hole: Ø 83 mm
- wall thickness 1.5-3 mm
- for indoor - normal environment and (or) protected outdoor installation
- ambient temperature - 25 °C to + 35 °C
- glow wire test IEC 60695-2-11: 750 °C

MV FP 66

Flange

IP 55

- with cable entry glands and screws
- sealing range: Ø 30-72 mm
- wall thickness of at least 1.5 mm

KHR 01

Cable retention for cable diameter 6.5 - 14 mm

- set with 10 x 6 cable rentention rings
- 30 pieces for cable diameter 6,5 - 10 mm
- 30 pieces for cable diameter 10 - 14 mm

KHR 02

Cable retention for cable diameter 10 - 16 mm

- set with 10 x 6 cable rentention rings
- 30 pieces for cable diameter 10 - 14 mm
- 30 pieces for cable diameter 13 - 16 mm

Outside diameter of conventional cable cross sections. The outside diameters are average values of different products.

Cable cross section	NYM	NYY	NYCY NYCWY
1x4 mm²	Ø 8 mm	Ø 9 mm	–
1x6 mm²	Ø 8.5 mm	Ø 10 mm	–
1x10 mm²	Ø 9.5 mm	Ø 10.5 mm	–
1x16 mm²	Ø 11 mm	Ø 12 mm	–
1x25 mm²	–	Ø 14 mm	–
1x35 mm²	–	Ø 15 mm	–
1x50 mm²	–	Ø 16.5 mm	–
1x70 mm²	–	Ø 18 mm	–
1x95 mm²	–	Ø 20 mm	–
1x120 mm²	–	Ø 21 mm	–
1x150 mm²	–	Ø 23 mm	–
1x185 mm²	–	Ø 25 mm	–
1x240 mm²	–	Ø 28 mm	–
1x300 mm²	–	Ø 30 mm	–
2x1.5 mm²	Ø 10 mm	Ø 12 mm	–
2x2.5 mm²	Ø 11 mm	Ø 13 mm	–
2x4 mm²	–	Ø 15 mm	–
2x6 mm²	–	Ø 16 mm	–
2x10 mm²	–	Ø 18 mm	–
2x16 mm²	–	Ø 20 mm	–
2x25 mm²	–	–	–
2x35 mm²	–	–	–
3x1.5 mm²	Ø 10.5 mm	Ø 12.5 mm	Ø 13 mm
3x2.5 mm²	Ø 11 mm	Ø 13 mm	Ø 14 mm
3x4 mm²	Ø 13 mm	Ø 16 mm	Ø 16 mm
3x6 mm²	Ø 15 mm	Ø 17 mm	Ø 17 mm
3x10 mm²	Ø 18 mm	Ø 19 mm	Ø 18 mm
3x16 mm²	Ø 20 mm	Ø 21 mm	Ø 21 mm
3x25 mm²	–	Ø 26 mm	–
3x35 mm²	–	–	–
3x50 mm²	–	–	–
3x70 mm²	–	–	–
3x95 mm²	–	–	–
3x120 mm²	–	–	–
3x150 mm²	–	–	–
3x185 mm²	–	–	–
3x240 mm²	–	–	–
3x25/16 mm²	–	Ø 27 mm	Ø 27 mm
3x35/16 mm²	–	Ø 28 mm	Ø 27 mm
3x50/25 mm²	–	Ø 32 mm	Ø 32 mm
3x70/35 mm²	–	Ø 32-36 mm	Ø 36 mm
3x95/50 mm²	–	Ø 37-41 mm	Ø 40 mm
3x120/70 mm²	–	Ø 42 mm	Ø 43 mm
3x150/70 mm²	–	Ø 46 mm	Ø 47 mm
3x185/95 mm²	–	Ø 52 mm	Ø 48-54 mm
3x240/120 mm²	–	Ø 57-63 mm	Ø 60 mm
3x300/150 mm²	–	Ø 63-69 mm	–

Cable cross section	NYM	NYY	NYCY NYCWY
4x1.5 mm²	Ø 11 mm	Ø 13.5 mm	Ø 14 mm
4x2.5 mm²	Ø 12.5 mm	Ø 14.5 mm	Ø 15 mm
4x4 mm²	Ø 14.5 mm	Ø 17.5 mm	Ø 17 mm
4x6 mm²	Ø 16.5 mm	Ø 18 mm	Ø 18 mm
4x10 mm²	Ø 18.5 mm	Ø 20 mm	Ø 20 mm
4x16 mm²	Ø 23.5 mm	Ø 23 mm	Ø 23 mm
4x25 mm²	Ø 28.5 mm	Ø 28 mm	Ø 28 mm
4x35 mm²	Ø 32 mm	Ø 26-30 mm	Ø 29 mm
4x50 mm²	–	Ø 30-35 mm	Ø 34 mm
4x70 mm²	–	Ø 34-40 mm	Ø 37 mm
4x95 mm²	–	Ø 38-45 mm	Ø 42 mm
4x120 mm²	–	Ø 42-50 mm	Ø 47 mm
4x150 mm²	–	Ø 46-53 mm	Ø 52 mm
4x185 mm²	–	Ø 53-60 mm	Ø 60 mm
4x240 mm²	–	Ø 59-71 mm	Ø 70 mm
4x25/16 mm²	–	–	Ø 30 mm
4x35/16 mm²	–	–	Ø 30 mm
4x50/25 mm²	–	–	Ø 36.5 mm
4x70/35 mm²	–	–	Ø 40 mm
4x95/50 mm²	–	–	Ø 44.5 mm
4x120/70 mm²	–	–	Ø 48.5 mm
4x150/70 mm²	–	–	Ø 53 mm
4x185/95 mm²	–	–	–
4x240/120 mm²	–	–	–
5x1.5 mm²	Ø 12 mm	Ø 15 mm	Ø 15 mm
5x2.5 mm²	Ø 13.5 mm	Ø 16 mm	Ø 17 mm
5x4 mm²	Ø 15.5 mm	Ø 16.5 mm	Ø 18 mm
5x6 mm²	Ø 18 mm	Ø 19 mm	Ø 20 mm
5x10 mm²	Ø 20 mm	Ø 21 mm	–
5x16 mm²	Ø 26 mm	Ø 24 mm	–
5x25 mm²	Ø 31.5 mm	–	–
7x1.5 mm²	Ø 13 mm	Ø 16 mm	–
7x2.5 mm²	Ø 14.5 mm	Ø 16.5 mm	–
19x1.5 mm²	–	Ø 22 mm	–
24x1.5 mm²	–	Ø 25 mm	–

Assignment of cable outside diameters to cable entries (glands, grommets etc.)

Outside diameters of cables		Cable entry metric
Ø min.	Ø max.	
3 mm	6 mm	AKM/ASS 12
5 mm	10 mm	AKM/ASS 16
6.5 mm	13.5 mm	AKM/ASS 20
11 mm	17 mm	AKM/ASS 25
15 mm	21 mm	AKM/ASS 32
19 mm	28 mm	AKM/ASS 40
27 mm	35 mm	AKM/ASS 50
35 mm	42 mm	AKM/ASS 63
4.8 mm	11 mm	ESM 16
6 mm	13 mm	ESM 20
9 mm	17 mm	ESM 25
9 mm	23 mm	ESM 32
17 mm	30 mm	ESM 40
3.5 mm	12 mm	STM 16
5 mm	16 mm	STM 20
5 mm	21 mm	STM 25
13 mm	26.5 mm	STM 32
13 mm	34 mm	STM 40

Outside diameters of cables		Cable entry metric
Ø min.	Ø max.	
5 mm	10 mm	EDK 16
6 mm	13 mm	EDK 20
9 mm	17 mm	EDK 25
8 mm	23 mm	EDK 32
11 mm	30 mm	EDK 40
conduit connection		
M 16		EDR 16
M 20		EDR 20
M 25		EDR 25
M 32		EDR 32
M 40		EDR 40

AKS 9

for knockouts Pg 9

IP 65

- sealing range: Ø 4-8 mm
- for bore-hole Pg 9, Ø 15.5 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2-11: 960 °C
- Colour: grey, RAL 7035

AKS 11

for knockouts Pg 11

IP 65

- sealing range: Ø 5-10 mm
- for bore-hole Pg 11, Ø 19 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2-11: 960 °C
- Colour: grey, RAL 7035

AKS 13,5

for knockouts Pg 13.5

IP 65

- sealing range: Ø 6-12 mm
- bore-hole Pg 13,5, Ø 21 mm
- wall thickness up to 3 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2-11: 960 °C
- Colour: grey, RAL 7035

AKS 16

for knockouts Pg 16

IP 65

- sealing range: Ø 10-14 mm
- for bore-hole Pg 16, Ø 23 mm
- wall thickness up to 4 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2-11: 960 °C
- Colour: grey, RAL 7035

AKS 21

for knockouts Pg 21

IP 65

- sealing range: Ø 13-18 mm
- for bore-hole Pg 21, Ø 29 mm
- wall thickness up to 4 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2-11: 960 °C
- Colour: grey, RAL 7035

AKS 29

for knockouts Pg 29

IP 65

- sealing range: Ø 18-25 mm
- for bore-hole Pg 29, Ø 37.5 mm
- wall thickness up to 4 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2-11: 960 °C
- Colour: grey, RAL 7035

AKS 36

for knockouts Pg 36

IP 65

- sealing range: Ø 22-32 mm
- for bore-hole Pg 36, Ø 47.5 mm
- wall thickness of up to 5 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2-11: 960 °C
- Colour: grey, RAL 7035

AKS 42

for knockouts Pg 42

IP 65

- sealing range: Ø 30-38 mm
- for bore-hole Pg 42, Ø 54,5 mm
- wall thickness of up to 5 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2-11: 960 °C
- Colour: grey, RAL 7035

AKS 48

for knockouts Pg 48

IP 65

- sealing range: Ø 34-44 mm
- bore-hole Pg 48, Ø 60 mm
- wall thickness of up to 6 mm
- with strain relief and locknut
- for indoor (normal environment and/or protected outdoor) and outdoor installation (harsh environment and/or outdoor)
- ambient temperature - 25 °C to + 55 °C
- glow wire test IEC 60695-2-11: 960 °C
- Colour: grey, RAL 7035

Cable entry systems

Technical details

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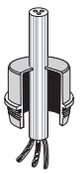
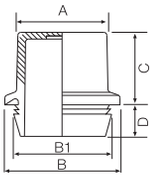
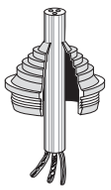
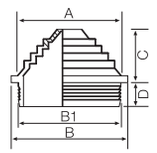




Grommets in mm	A	B	B1	C	D
ESM 16	16.5	22	18.5	14.5	8.5
ESM 20	20.5	26	22.5	14.5	8.5
ESM 25	26.0	31	27.5	14.5	8.5
ESM 32	33.0	38	34.5	17.5	8.5
ESM 40	41.0	46	42.5	17.5	8.5

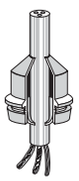
Grommets ESM
Degree of protection IP 55
Grommets ESM are inserted into knockouts. There is no counternut required!

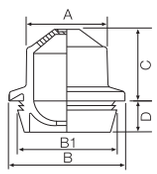




Stepped grommets in mm	A	B	B1	C	D
STM 16	13.2	21.2	19	7.4	8.0
STM 20	18.0	25	23	9.2	8.0
STM 25	21.6	30	28	11.5	7.4
STM 32	27.6	37	35	11.5	8.6
STM 40	33.6	45	43	15.1	8.6

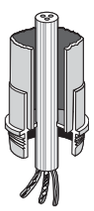
Stepped grommets STM
Degree of protection IP 55
Stepped glands STM are inserted into knockouts. There is no counternut required!

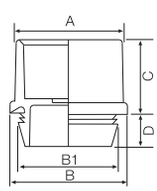




Grommets in mm	A	B	B1	C	D
EDK 16	14.5	22	18.5	13.5	8.5
EDK 20	18.5	26	22.5	14.5	8.5
EDK 25	23.5	31	27.5	14.5	8.5
EDK 32	30.5	38	34.5	19.5	8.5
EDK 40	38.5	46	42.5	19.5	8.5

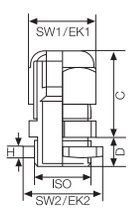
Grommets EDK
Degree of protection IP 65
Grommets EDK are inserted into knockouts. There is no counternut required!



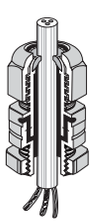


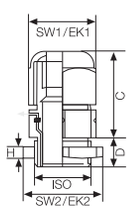
Grommets for conduits in mm	A	B	B1	C	D
EDR 16	20	22	18.5	14.5	8.5
EDR 20	24	26	22.5	14.5	8.5
EDR 25	29	31	27.5	14.5	8.5
EDR 32	36	38	34.5	17.5	8.5
EDR 40	44	46	42.5	17.5	8.5

Grommets for conduits EDR
Degree of protection IP 65
Grommets for conduits EDR are inserted into knockouts. There is no counternut required!

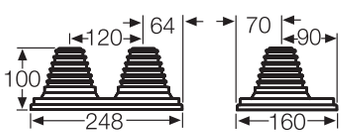


Cable glands AKM/ASS with strain relief counternut. degree of protection IP 65 in mm	ISO	SW1 across flats	EK1 across corners Ø	C max.	D	SW2 across flats	EKS across corners Ø	H
AKM/ASS 12	M 12	15	16.4	22	8	17	19.0	5
AKM/ASS 16	M 16	20	22.0	26	8	22	24.7	5
AKM/ASS 20	M 20	24	26.5	29	8	27	30.2	6
AKM/ASS 25	M 25	29	32.0	34	8	32	36.0	6
AKM/ASS 32	M 32	36	39.7	39	10	41	46.0	7
AKM/ASS 40	M 40	46	50.5	46	10	50	54.1	7
AKM/ASS 50	M 50	55	60.0	51	10	60	66.3	8
AKM/ASS 63	M 63	68	74.7	55	10	75	83.0	8

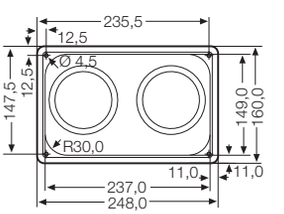




Combi climate glands KBM / KBS with strain relief counternut. degree of protection IP 66 / IP 67 in mm	ISO	SW1 across flats	EK1 across corners Ø	C max.	D	SW2 across flats	EK2 across corners Ø	H
KBM/KBS 20	M 20	24	27.0	42	8	27	29.0	5
KBM/KBS 25	M 25	29	32.0	45	8	32	35.5	5
KBM/KBS 32	M 32	36	40.0	47	10	40	44.5	6
KBM/KBS 40	M 40	46	50.5	59	10	50	54.1	7



Flange MV FP 66
Degree of protection IP 55
for retrofitting onto boxes made of sheet steel
material thickness ≥ 1.5 mm



Cable entry systems

Technical Details

Operating and Ambient Conditions

	ESM ... STM ... EDK ... EDR ... KST... MV FP 66	AKM ... ASS ...	AKS ... KBM ... KBS ...
Application area	Suitable for indoor installation (normal environment and/or protected outdoor)	Suitable for **outdoor installation** - harsh environment and / or outdoor	
Ambient temperature - Average value over 24 hours - Maximum value - Minimum value	 + 35 °C + 40 °C – 25 °C	 + 55 °C + 70 °C – 25 °C	 + 55 °C + 70 °C – 25 °C
Fire protection in the event of internal faults	Demands placed on electrical devices from standards and laws: Minimum requirements - Glow wire test in accordance with IEC 60695-2-11: - 650 °C for boxes and Cable glands		
Burning behaviour - Glow wire test IEC 60695-2-11 - UL Subject 94	 750 °C – flame-retardant self-extinguishing	 960 °C V-0 flame-retardant self-extinguishing	 960 °C V-2 flame-retardant self-extinguishing
Toxic behaviour	halogen-free silicone-free	halogen-free silicone-free	halogen-free silicone-free
	“Halogen-free” in accordance with IEC 60754-2 “Common test methods for cables - Determination of the amount of halogen acid gas”. For material properties see technical data.		


HENKEL
Technische Angaben
TÜV
DIN

Technical data

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Further technical information can be found on the Internet
www.hensel-electric.de -> Products

Products	Material used	Glow wire test IEC 60 695-2-11	UL Subject 94	Temperature resistance	Chemical resistance [1]					
					Acid 10 %	Lye 10 %	Alcohol	Petrol (MAK) [2]	Benzene (MAK) [2]	Minerar oil
DK 02.. / DK 04.. / DK 06.. / DK 10.. / RK 02.. / RK 04.. / DN	PP (polypropylene)	750 °C	V-2	-25 °C / +80 °C	+	+	+	0	—	0
DK 16.. / DK 25.. / DK 35.. / DK 50..	PC (Polycarbonat)	750 °C	V-2	-40 °C / +120 °C	+	+	0	+	—	+
KF .... G / KF .... H / KF .... B / KF .... C WP .... / bottom parts of Mi ... / FP ... / SB FK 04.. / FK 06.. / FK 16..	PC (polycabonate) (with GFS)	960 °C	V-0	-40 °C / +120 °C	+	+	0	+	—	+
K 12.. / K 24.. lid Mi ... / SB ... / door and lid KV ... / door and lid KV PC .. / door and frame FP ... / hinged lid KG ...	PC (Polycarbonat)	960 °C	V-0	-40 °C / +120 °C	+	+	0	+	—	+
DE .... / DP .... KV .... / KG	PS (Polystyrol)	750 °C	V-2	-40 °C / +70 °C	+	+	+	—	—	0
Sealings DK 02.. / DK 04.. / DK 06.. / DK 10.. / DK 16.. / RK 02.. / RK 04.. / KF 02.. / KF 04.. / KF 06.. / KF 10.. / KF 16.. DP ... / DPC ... / DE ... / KV ... / KV PC ... / KF PV ... / Mi FP ... / FP FG ... ESM .. / STM .. / EDK .. / EDR .. / KST .. / DPS .. / ERA .. / EKA .. / EVS ..	TPE (Thermo-plastisches Elastomer)	750 °C	—	-25 °C / +100 °C	+	+	+	0	0	0
Sealings DK 25.. / DK 35.. / DK 50.. / KF 25.. / KF 35.. / KF 50../ K ... / KV ... / KV PC ... / Mi ... / FP ... / SB ...	PUR (polyurethane)	—	—	-25 °C / +80 °C	0	+	0	0	—	+
AKM .. / ASS .. / BM ...	PA (polyamide)	960 °C	V-0	-40 °C / +100 °C	+	0	+	+	+	+
AKS .. KBM .. / KBS ..	PA (polyamide)	960 °C	V-2	-40 °C / +100 °C	+	0	+	+	+	+
AVS .. / AFM ..	PA (polyamide)	750 °C	V-2	-40 °C / +100 °C	+	0	+	+	+	+
Sealings AKM .. / AKS .. / AKS ..	CR/NBR (polychloroprene - nitrile rubber)	—	—	-20 °C / +100 °C	+	+	+	0	—	0
Sealings - inner part ASS ..	TPE (Evoprene)	—	—	-30 °C / +100 °C	+	—	+	—	—	—
Sealings - outer part ASS ..	CR (chloroprene rubber)	—	—	-30 °C / +100 °C	+	+	+	0	—	0
Sealings KBM .. / KBS ..	EPDM ethylene propylene diene monomer rubber	—	—	-40 °C / +130 °C	+	+	+	—	—	—

(+ = resistance; 0 = partially resistance; — = not resistant)

As at: January 2017

1) The specifications on chemical resistance are a general guide. In individual cases it may be necessary to check resistance in combination with other chemicals and ambient conditions (temperature. concentration. etc.)

2) (MAK) - Maximum allowable concentration (work place)

Directive 2011/65/EU (RoHS)

We state all these details according to the best of our knowledge. They correspond to the present state of the art. This information is not to be understood as a warranty in the sense of warranty law.

Under the intended use, our products do not fall within the scope of the Electrical Equipment Act (Electrical and Electronic Equipment).

The following product series comply with Directive 2002/65/EC (RoHS):

- ENYCASE® DK Cable junction boxes
- ENYBOARD KV Small-type distribution boards
- ENYSTAR® Distribution boards with door (empty enclosures, circuit breaker boxes)
- ENYMOD Mi Power distribution boards (empty boxes, circuit breaker boxes)
- ENYFLEX Empty enclosures in according with IEC 62208
- ENYFIT Cable entry systems

Regulation (EC) No 1907/2006 REACH

Gustav Hensel GmbH & Co. KG meets the requirements set by REACH (EG) No. 1907/2006. We shall inform you in the framework of our business relations about the changes to our products resulting from REACH and agree on suitable measures on a case-by-case basis.

As far as article 33 of REACH is concerned, we herby inform you that our products and their packaging materials do not contain any substances on the candidate list according to article 59 (1, 10) of the above-mentioned regulation in a concentration above 0.1 % weight by weight (as of 12/17/2015).

Degrees of protection according to IEC 60 529

Degree of protection of electrical equipment
Electrical equipment must be protected for safety reasons from external influences and conditions. Enclosures provide the protection of electrical equipment against access to hazardous parts and against solid foreign objects, as well as dust, humidity and water.
The international standard IEC 60 529, the german standard *DIN EN 60 529 / VDE 0470 Part 1 September 2000* with the title "Degrees of protection provided by enclosures (IP Code)", form the basis for the determination and designation of the degree of protection.
The degree of protection provided by an enclosure is proven by means of standardized testing methods.
The becoming "aged" of test samples before carrying out the actual type tests are part of the standardized testing methods.
Ageing is made by an more-active increased thermal treatment.

	1st characteristic numeral: Protection against foreign solid objects and direct contact		Additonal letter		
	Meaning for the protection of equipment against ingress of solid foreign objects and of persons against access to hazardous parts with (non-protected) back of hand, finger, tool or wire.		Additional letter where the actual protection against access to hazardous parts is higher than that indicated by the 1st characteristic numeral (e.G. IP 20C)		Application
	Protection against ingress of solid foreign objects ...	Protection against access to hazardous parts with ...		Short form: Protection against access with ...	Symbol
IP 0X	non-protected	non-protected			
IP 1X	solid foreign objects ≥ 50 mm Ø	the back of a hand	**A**	the back of the hand	
IP 2X	solid foreign objects ≥ 12.5 mm Ø	a finger	**B**	a finger	
IP 3X	solid foreign objects ≥ 2.5 mm Ø	a tool ≥ 2.5 mm Ø	**C**	a tool ≥ 2.5 mm Ø	
IP 4X	solid foreign objects ≥ 1 mm Ø	a wire ≥ 1 mm Ø	**D**	a wire ≥ 1 mm Ø	
IP 5X	dust-protected	with any auxiliary equipment (wire)			
IP 6X	dust-tight	contact with any auxiliary equipment (wire)			

Meaning of the first characteristic numeral
The first characteristic numeral indicates, to what extent the enclosure provides protection for persons against the access to (affecting of) hazardous parts. This protection is reached. when the penetration into an enclosure of a part of the body or a foreign object, which is held by a person, is prevented or limited. At the same time the enclosure provides protection of equipment against the penetration of solid foreign objects. This is the reason for having two descriptions and two definitions to each first characteristic numeral.

Meaning of the second characteristic numeral
The second characteristic numeral indicates the protection of the enclosure against ingress of water with harmful effects on the electrical equipment.

The marking system consists of the code letters **IP** and two following characteristic numerals.

Example:

IP 6 7

Code letters (**I**nternational **P**rotection)

2nd characteristic numeral: Protection against ingress of water with harmful effects

	IP X0	IP X1	IP X2	IP X3	IP X4	IP X5	IP X6	IP X7	IP X9
	Non-protected	Protection against vertical dripping water	Protected against dripping water, when the housing is tilted up to 15°	Protection for occasional cleaning procedures, not direct spraying of the equipment (spray-ing water)	Protection for occasional cleaning procedures, not direct spraying of the equipment (splashing water)	Protection of operational processes, not direct spraying of the equipment (water jets)	Protection of operational processes, not direct spraying of the equipment (powerful water jets)	Protection against the effects of temporary immersion in water	Protection against cleaning processes (direct jet) and high water temperatures
									
	IP 20								
	IP 30	IP 31							
	IP 40	IP 41	IP 42	IP 43	IP 44				
					IP 54	IP 55			
						IP 65	IP 66	IP 67	IP 69

Additional letters to the IP Code

The IP Code can still be extended by additional letters. Additional letters indicate the degree of protection against access to hazardous parts. Additonal letters follow the two characteristic numerals. Additional letters are only used, - if the actual protection against access to hazardous parts is higher than by the first characteristic numeral indicated; or - if only the protection against access to hazardous parts is indicated and the degree of protection against solid foreign objects is not considered. The first characteristic numeral being then replaced by an X. An enclosure shall only be designated with a stated degree of protection indicated by the additional letter if the enclosure also complies with all lower degrees of protection.

Technical data

Recommendation for outdoor installations, humid and wet areas and locations

Country-specific requirements have to be observed!

Requirements of German standard DIN VDE 0100 Part 737 for compliance with IP degree of protection

1. Requirement
Protection against ingress of water for all electrical equipment (devices) with the appropriate encapsulation (2nd characteristic numeral)

1.1. Minimum requirement for electrical equipment:

Note for outdoor installation:

„Protected outdoors“
Electrical equipment has to be protected from precipitation (like rain, snow or hail) as well as from direct sunlight.

„Non-protected outdoors“
Electrical equipment can be exposed to precipitation or direct sunlight.
With both assembly sites the climatic effects on the installed equipment must be observed, for example, high or low ambient temperatures or condensation.

1.2. Minimum requirements for electrical equipment, that must withstand higher environmental stresses:

degree of protection IP X 4

with **non-direct** jets of water within occasional cleaning procedures, e.g. agriculture

degree of protection IP X 5

with **non-direct** jets of water within operational cleaning procedures, e.g. carwash

degree of protection IP X 5 and additional consultation with the manufacturer:

with **direct** jets of water within occasional cleaning procedures of enclosures, e.g. butcher's shop

Country-specific requirements have to be observed!

2. Requirement of German Standard DIN VDE 0100 Part 737

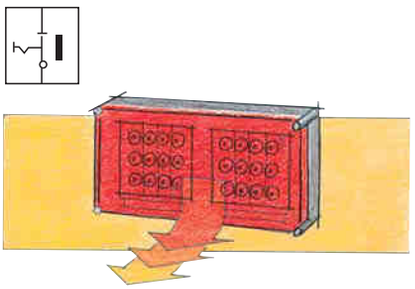
4.1 Electrical equipment must be selected taking into account the external influences to which they may be exposed. Proper operation and the effectiveness of the required degrees of protection must be assured.

Note: Data from the manufacturer!

How does condensed water occur in enclosures with a high degree of protection?

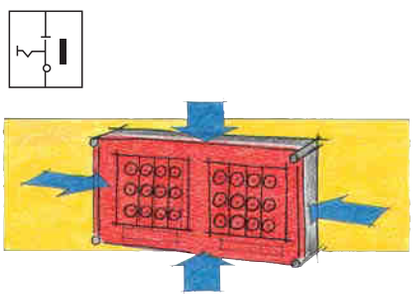
Condensed water only forms in enclosures with a higher degree of protection than IP 54 due to temperature difference from inside to outside. Humidity can not evaporate because of the high degree of protection of the enclosure.

System switched on.



The internal temperature is higher than the external temperature due to the power dissipation of the built-in devices.

System switched on.



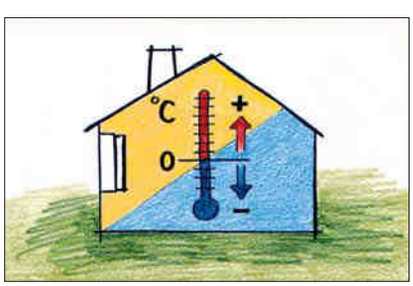
The warm air inside the enclosure attempts to accumulate moisture. This comes from outside through the seal as the enclosures are not gas-tight.

System switched off.

The internal temperature is reduced by cooling down the system e.g. by switching off the loads. The cooler air emits moisture which is collected as condensed water on the cooling inner surfaces.

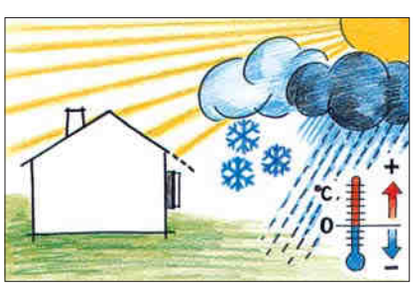
How does condensed water occur in enclosures with a high degree of protection?

Formation of condensed water for **indoor installations:**



In areas where high levels of air humidity and large temperature fluctuations are expected e.g. in laundry rooms, kitchens, car washes etc.

Formation of condensed water in **protected outdoor installations** (protected against weather influences) **or unprotected outdoor** installations:

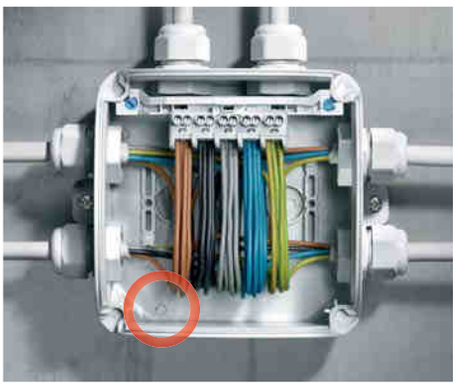


Here condensed water can be formed dependent on the weather, high air humidity, direct sunlight and temperature differences compared to the wall.

Measure against formation of condensation water
e. g. Cable junction boxes

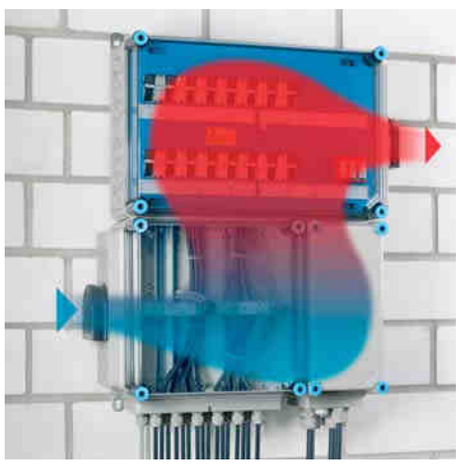
1. Select the installation site (avoid temperature differences).
2. Open condensed water membrane at the lowest point of the cable junction box (maybe drill hole Ø 5 mm).
3. Enable exchange of air via ventilation.

Open condensation water membrane



e.g. Mi Distribution boards

Ventilation flange for vertical mounting on lateral box walls in case of extremely high inside temperature or the risk of water condensation, degree of protection IP 44.



Cable entry and ventilation
Combi climate glands

Combi climate glands ensure pressure compensation between enclosure interior and ambient air via an inserted, breathable membrane and ingress of water from outside is prevented.

Technical data

International short forms of types of conductors
IK code

International short forms of types of conductors

r (rigid)				f (flexible)
sol (solid)		s (stranded)		
round conductors	sector-type conductors	round conductors	sector-type conductors	flexible conductors
RE (round single)	SE (sector, solid)	RM (round stranded)	SM (sector, stranded)	

IK Code
Protection against mechanical shock (impact strength)

IK Code: Demand energy value [W] in Joules.

The European standard for enclosures EN 50298:98 includes also the IK Code for impact strength.

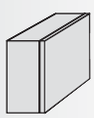
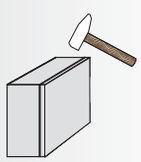
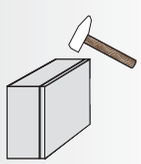
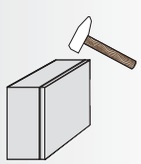
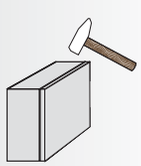
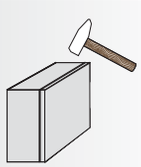
With the DIN EN 50102 (VDE 0470 part of 100) “Degrees of protection by enclosures for electrical operational funds (equipment) against outside mechanical loads (IK Code)”. is defined with the identification letters IK.

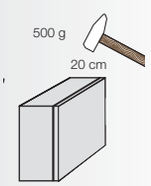
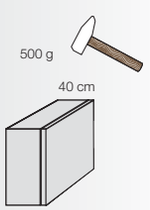
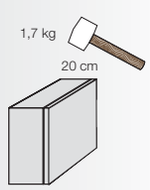
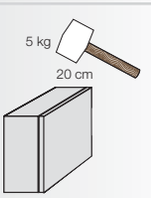
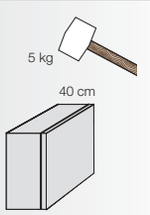
This standard regulates the methods for the description of the protection of enclosures against outside mechanical loads.

This indicates the degree of protection. which is provided by an enclosure against a mechanical load (demand energy in joules).

HENSEL tests its enclosures and enclosure systems additionally also according to this standard.

Classification of the impact strength by the IK Code

IK Code	[W] in J	
IK00	no protection	
IK01	0,14	
IK02	0,2	
IK03	0,35	
IK04	0,5	
IK05	0,7	

IK Code	[W] in J	
IK06	1	
IK07	2	
IK08	5	
IK09	10	
IK10	20	

Technical data

Outside diameter of conventional cable cross-sections
Short forms of cables

The outside diameters are average values of different products.

Cable cross-section mm²	NYM mm Ø	NYY mm Ø	NYCY NYCWY mm Ø
1x4	8	9	–
1x6	8.5	10	–
1x10	9.5	10.5	–
1x16	11	12	–
1x25	–	14	–
1x35	–	15	–
1x50	–	16.5	–
1x70	–	18	–
1x95	–	20	–
1x120	–	21	–
1x150	–	23	–
1x185	–	25	–
1x240	–	28	–
1x300	–	30	–
2x1.5	10	12	–
2x2.5	11	13	–
2x4	–	15	–
2x6	–	16	–
2x10	–	18	–
2x16	–	20	–
2x25	–	–	–
2x35	–	–	–
3x1.5	10.5	12.5	13
3x2.5	11	13	14
3x4	13	16	16
3x6	15	17	17
3x10	18	19	18
3x16	20	21	21
3x25	–	26	–
3x35	–	–	–
3x50	–	–	–
3x70	–	–	–
3x95	–	–	–
3x120	–	–	–
3x150	–	–	–
3x185	–	–	–
3x240	–	–	–
3x25/16	–	27	27
3x35/16	–	28	27
3x50/25	–	32	32
3x70/35	–	32-36	36
3x95/50	–	37-41	40
3x120/70	–	42	43
3x150/70	–	46	47
3x185/95	–	52	48-54
3x240/120	–	57-63	60
3x300/150	–	63-69	–

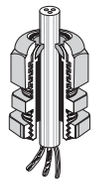
Cable cross-section mm²	NYM mm Ø	NYY mm Ø	NYCY NYCWY mm Ø
4x1.5	11	13.5	14
4x2.5	12.5	14.5	15
4x4	14.5	17.5	17
4x6	16.5	18	18
4x10	18.5	20	20
4x16	23.5	23	23
4x25	28.5	28	28
4x35	32	26-30	29
4x50	–	30-35	34
4x70	–	34-40	37
4x95	–	38-45	42
4x120	–	42-50	47
4x150	–	46-53	52
4x185	–	53-60	60
4x240	–	59-71	70
4x25/16	–	–	30
4x35/16	–	–	30
4x50/25	–	–	34-37
4x70/35	–	–	40
4x95/50	–	–	44.5
4x120/70	–	–	48.5
4x150/70	–	–	53
4x185/95	–	–	–
4x240/120	–	–	–
5x1.5	12	15	15
5x2.5	13.5	16	17
5x4	15.5	16.5	18
5x6	18	19	20
5x10	20	21	–
5x16	26	24	–
5x25	31.5	–	–
7x1.5	13	16	–
7x2.5	14.5	16.5	–
19x1.5	–	22	–
24x1.5	–	25	–

Short forms of cables

NYM	Light plastic-sheathed cable
NYY	Plastic-sheathed cable
NYCY	Plastic-sheathed cable with concentric conductor
NYCWY	Plastic-sheathed cable with concentric. undulated conductor

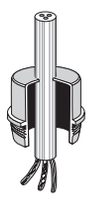
Technical data

Assignment of cable outside diameters to cable glands
Standards



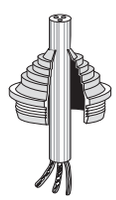
Outside diameter of cables		Cable entry metric
min. mm Ø	max. mm Ø	
3	6.5	AKM/ASS 12
5	10	AKM/ASS 16
6.5	13.5	AKM/ASS 20
10	17	AKM/ASS 25
14	21	AKM/ASS 32
20	28	AKM/ASS 40
25	35	AKM/ASS 50
35	48	AKM/ASS 63
5	10	AFM 16
8	13	AFM 20
11	17	AFM 25
15	21	AFM 32

Cable glands AKM/ASS
Degree of protection: IP 66/67/69
With strain relief and counternut.



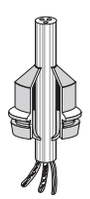
Outside diameter of cables		Cable entry metric
min. mm Ø	max. mm Ø	
4.8	11	ESM 16
6	13	ESM 20
9	17	ESM 25
9	23	ESM 32
17	30	ESM 40

Grommets ESM
Degree of protection: IP 55
Grommets are inserted into knockouts.
No nut is necessary!



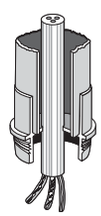
Outside diameter of cables		Cable entry metric
min. mm Ø	max. mm Ø	
3.5	12	STM 16
5	16	STM 20
5	21	STM 25
13	26.5	STM 32
13	34	STM 40

Stepped grommets STM
Degree of protection: IP 55
Stepped grommets are inserted into knock outs.
No nut is necessary!



Outside diameter of cables		Cable entry metric
min. mm Ø	max. mm Ø	
5	10	EDK 16
6	13	EDK 20
9	17	EDK 25
8	23	EDK 32
11	30	EDK 40

Grommets EDK
Degree of protection: IP 65
Grommets are inserted into knock outs.
No nut is necessary!



Outside diameter of cables		Cable entry metric
min. mm Ø	max. mm Ø	
Conduit		
M 16		EDR 16
M 20		EDR 20
M 25		EDR 25
M 32		EDR 32
M 40		EDR 40

Grommets for conduits EDR
Degree of protection: IP 65
Grommets for concuits are inserted into knock outs.
No nut is necessary!

Hensel cable entries comply with the following standards and regulations:

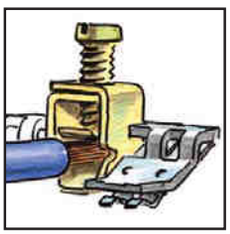
- EN 50262
  Metric cable entries for electrical installations

- EN 60423
  Conduits for electrical purposes - Outside diameter of conduits for electrical installations and threads for conduits and fittings

- IEC 60529
  Degrees of protection provided by enclosures (IP-Code)

PE and N FIXCONNECT® terminal

Rated connecting capacity of PE and N terminals

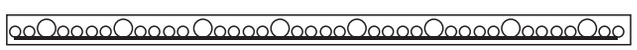
Clamping unit	Corresponding cross-sections/copper			
	max. number	from - to max.	max. number	from - to max.
Screw-type terminal 25 mm²				
	1	25 mm², s	1	25 mm², f
	1	16 mm², s	1	16 mm², f
	1	10 mm², sol	1	10 mm², f
	3	6 mm², sol } Tested as connecting terminal for several conductors of the same cross-sections for using in one circuit	1	6 mm², f
	3	4 mm², sol	1	4 mm², f
	4	2.5 mm², sol	1	2.5 mm², f
	4	1.5 mm², sol	1	1.5 mm², f
Plug-in terminal 4 mm² 	1	1.5 - 4 mm², sol	1	1.5 - 4 mm², f Without end ferrule; clamping unit has to be opened with a tool when conductor is inserted

Current carrying capacity of the connecting device: 75 A

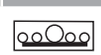
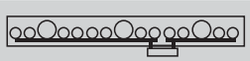
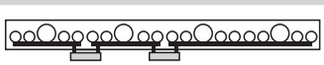
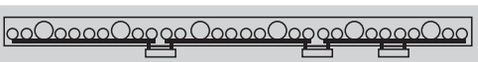
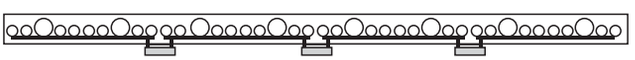
All terminals are secured against self loosening.

Terminal equipment and number of conductors to be connected

PE terminal for copper conductors

Number of modules	PE terminal up to 4 mm²	up to 25 mm²
3		
	4x4 mm²	1x25 mm²
4.5 6		
	4x4 mm²	2x25 mm²
9		
	8x4 mm²	2x25 mm²
12		
	12x4 mm²	2x25 mm²
18		
	16x4 mm²	4x25 mm²
24 36 (3-row) 48		
	24x4 mm²	6x25 mm²
36 (2-row) 54		
	32x4 mm²	8x25 mm²

N terminal for copper conductors

Number of modules	N terminal up to 4 mm²	up to 25 mm²	plug-in jumper
3			
	4x4 mm²	1x25 mm²	
4.5 6			
	4x4 mm²	2x25 mm²	
9			
	8x4 mm²	2x25 mm²	
12			
	12x4 mm²	2x25 mm²	
18			
	16x4 mm²	4x25 mm²	
24 36 (3-row) 48			
	24x4 mm²	6x25 mm²	
36 (2-row) 54			
	32x4 mm²	8x25 mm²	

Connnection of aluminum conductors

I. Chemical basics

The special conducting characteristics of aluminum can be seen in the fact that the surface of an aluminum conductor is immediately covered in a **non-conducting oxide layer** upon exposure to oxygen.

This characteristic leads to an increase in the temporary resistance between the aluminum conductors and the terminal body.

This can lead to terminal overheating and in the worst case fire.

Despite these special conditions. aluminum conductors can be connected if the terminal used is appropriate and the following conditions are taken into consideration when connecting.

II. Special terminal requirements for the connection of aluminum conductors

The suitability of terminal for connections with aluminum conductors needs to be evaluated and confirmed by the terminal manufacturer.

1. These terminals will thus meet the requirements for an aligned **electrochemical voltage sequence**. A disintegration of the base material (aluminum) will be prevented.
2. The terminal has an appropriate shape and surface to penetrate the grease layer or a very thin oxide layer on the aluminum conductor upon connection.

III. Appropriate preparation and handling of aluminum conductors

1. The non-insulated conductor ends need to have the oxide layer carefully scraped clean using a knife for example. In doing so no files, sand paper or brushes may be used.

2. Immediately after removing the oxide layer, the conductor end needs to be rubbed with an acid and alkali free grease such as technical vaseline and then immediately connected to the terminal. This in turn prevents oxygen from forming a non-conducting oxide layer.

3. Due to the flow tendency in aluminum the terminals need to be tightened before start up and after the first **200 operating hours** (note the appropriate torque).

4. The steps listed above need to be repeated if the conductor is removed and re-connected. I.e. the conductor has to be scraped again, greased and immediately connected, because it will be connected at a different position.

Test for dust protection
indicated by the first characteristic numerals 5 and 6 in accordance with IEC 60529

Test for protection against water
in accordance with IEC 60529
indicated by the characteristic numeral
7: temporary immersion
6: with powerful water jets,
4: splashing water
1: drip box

Test with vertical hammer
in accordance with IEC 60068-2-75

Test of screw-type clamping units
against loosening in accordance with IEC 60998-2-1

Glow wire test
in accordance with IEC 60695-2-11

Tests in the climatic test cabinet
according to IEC 60068-1
Resistance of materials against certain environmental influences such as heat, cold, humidity

Environmental testing -
Salt mist test in accordance with IEC 60068-2-11

Definition of Terms
Rated values for setting up low-voltage switchgear are given in the standard IEC 61 439-1

Rated voltage (U_n)
highest nominal value of the a.c. (r.m.s.) or d.c. voltage, declared by the assembly manufacturer, to which the main circuit(s) of the assembly is (are) designed to be connected.

Rated operational voltage (U_e) (of a circuit of an assembly)
value of voltage, declared by the assembly manufacturer, which combined with the rated current determines its application.

Rated insulation voltage (U_i)
r.m.s. withstand voltage value, assigned by the assembly manufacturer to the equipment or to a part of it, characterising the specified (long-term) withstand capability of the insulation.

Rated impulse voltage (U_{imp})
impulse withstand voltage value, declared by the assembly manufacturer, characterising the specified withstand capability of the insulation against transient overvoltages.

Rated current (I_n)
value of current, declared by the assembly manufacturer taking into consideration the ratings of the components, their disposition and application, which can be carried without the temperature-rise of various parts of the assembly exceeding specified limits under specified conditions.

Prospective short circuit current (I_{cp})
current which flows when the supply conductors to the circuit are short-circuited by a conductor of negligible impedance located as near as practicable to the supply terminals of the assembly.

Rated peak withstand current (I_{pk})
value of peak short-circuit current, declared by the assembly manufacturer, that can be withstood under specified conditions.

Rated short-time withstand current (I_{cw})
r.m.s value of short-time current, declared by the assembly manufacturer, that can be carried without damage under specified conditions, defined in terms of a current and time.

Rated current of the assembly (I_{nA})
The rated current of the assembly is the smaller of:
- the sum of the rated currents of the incoming circuits within the assembly operated in parallel;

- the total current which the main busbar is capable of distributing in the particular assembly arrangement.

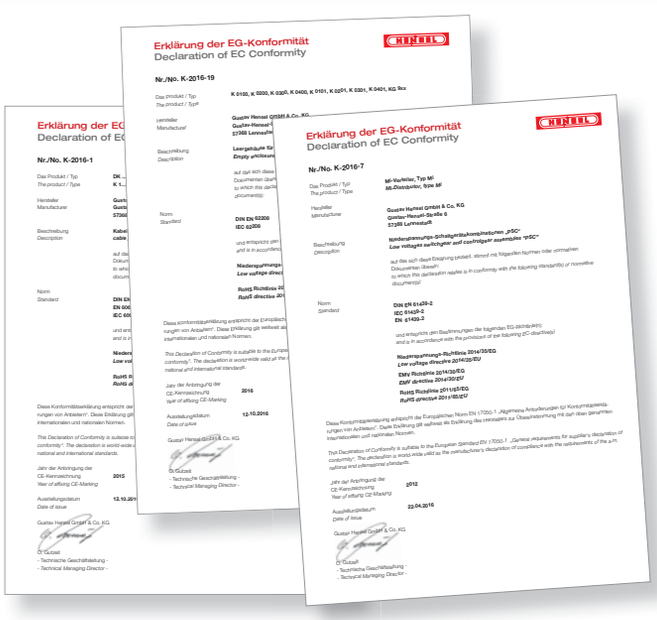
This current shall be carried without the temperature rise of the individual parts exceeding the limits specified in the standard.

Rated current of a circuit (I_{nc})
The rated current of a circuit is stated by the assembly manufacturer, taking into consideration the ratings of the devices within the circuit, their disposition and application. This current shall be carried without the temperature rise of the various parts of the assembly exceeding the limits specified in the standard when the circuit is loaded alone.

Rated diversity factor (RDF)
per unit value of the rated current, assigned by the assembly manufacturer, to which outgoing circuits of an assembly can be continuously and simultaneously loaded taking into account the mutual thermal influences.

Technical data

EC Declaration of conformity



Erklärung der EG-Konformität
Declaration of EC Conformity

Nr./No. K-2016-19

Erklärung der EG-Konformität
Declaration of EC Conformity

Nr./No. K-2016-7

Erklärung der EG-Konformität
Declaration of EC Conformity

HENSEL

Nr./No. K-2016-12

Das Produkt / Typ *The product / Type*	**FK 0402, FK 0404, FK 0604, FK 0606, FK 1606, FK 1608, FK 1610, FK 1616 FK 9025, FK 9105, FK 9255, FK 9259 FK 7045, 7105, FK 7165 FK 6505**
Hersteller Manufacturer	**Gustav Hensel GmbH & Co. KG Gustav-Hensel-Straße 6 57368 Lennestadt**
Beschreibung *Description*	**Kabelabzweigkästen mit Funktionserhalt E30-E90 *cable junction boxes tested for intrinsic fire resistance E30-E90***
	auf das sich diese Erklärung bezieht, stimmt mit folgenden Normen oder normativen Dokumenten überein: *to which this declaration relates is in conformity with the following standard(s) or normative document(s):*
Norm *Standard*	**DIN EN 60670-22 EN 60670-22 IEC 60670-22 DIN 4102-12**
	und entspricht den Bestimmungen der folgenden EG-Richtlinie(n): *and is in accordance with the provisions of the following EC-directive(s)*
	Niederspannungs-Richtlinie 2014/35/EG *Low voltage directive 2014/35/EU*
	RoHS Richtlinie 2011/65/EG *RoHS directive 2011/65/EU*

Diese Konformitätserklärung entspricht der Europäischen Norm EN 17050-1 „Allgemeine Anforderungen für Konformitätserklärungen von Anbietern". Diese Erklärung gilt weltweit als Erklärung des Herstellers zur Übereinstimmung mit den oben genannten internationalen und nationalen Normen.

This Declaration of Conformity is suitable to the European Standard EN 17050-1 „General requirements for supplier's declaration of conformity". The declaration is world-wide valid as the manufacturer's declaration of compliance with the requirements of the a.m. national and international standards.

Jahr der Anbringung der CE-Kennzeichnung *Year of affixing CE-Marking*	**2015**
Ausstellungsdatum *Date of issue*	**22.04.2016**

Gustav Hensel GmbH & Co. KG

O. Gutzeit
- Technische Geschäftsleitung -
- *Technical Managing Director* -

Info The current status of EC Declarations of conformity is available on the Internet at www.hensel-electric.de -> Products


HENSEL

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Notes

Meaning of icons

Area of application

"weatherproof",
for outdoor installation

Intrinsic fire resistance and insulation integrity

E30/E60/E90

E30

PH120

Degree of protection

IP 44

IP 54

IP 55

IP 55
using ESM grommets

IP 65

IP 65 with Nema 4X classification for UL/CSA approval

IP 66

IP 66/67

IP 69

Protection class

II, total insulated

Colour

grey RAL 7035

orange RAL 2003

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